Treating Substance Use Disorder in Older Adults

UPDATED 2020

TREATMENT IMPROVEMENT PROTOCOL

TIP 26

SAMHSA
Substance Abuse and Mental Health Services Administration

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Foreword

The Substance Abuse and Mental Health Services Administration (SAMHSA) is the U.S. Department of Health and Human Services agency that leads public health efforts to reduce the impact of substance abuse and mental illness on America's communities. An important component of SAMHSA's work is focused on dissemination of evidence-based practices and providing training and technical assistance to healthcare practitioners on implementation of these best practices.

The Treatment Improvement Protocol (TIP) series contributes to SAMHSA's mission by providing science-based, best-practice guidance to the behavioral health field. TIPs reflect careful consideration of all relevant clinical and health service research, demonstrated experience, and implementation requirements. Select nonfederal clinical researchers, service providers, program administrators, and patient advocates comprising each TIP's consensus panel discuss these factors, offering input on the TIP's specific topics in their areas of expertise to reach consensus on best practices. Field reviewers then assess draft content and the TIP is finalized.

The talent, dedication, and hard work that TIP panelists and reviewers bring to this highly participatory process have helped bridge the gap between the promise of research and the needs of practicing clinicians and administrators to serve, in the most scientifically sound and effective ways, people in need of care and treatment of mental and substance use disorders. My sincere thanks to all who have contributed their time and expertise to the development of this TIP. It is my hope that clinicians will find it useful and informative to their work.

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Executive Summary

Treatment Improvement Protocol (TIP) 26 provides a wide range of guidance in the latest evidence-based screening and assessment approaches, interventions, and services for substance misuse, including substance use disorders (SUDs), in older adults. It is intended for behavioral health service providers, healthcare professionals, and older adults, as well as those people who are significant in their lives.

Introduction

Older adults are a special group because they are particularly vulnerable to the negative effects of substances and therefore substance misuse. Further, providers, professionals, and family and caregivers tend to overlook substance misuse in older people, meaning they are less likely than younger adults to be correctly diagnosed and offered treatments, services, or referrals. This oversight makes SUDs particularly dangerous for this population in terms of possible effects on mortality and comorbid conditions (including physical, cognitive, and mental disorders). This TIP is designed to help providers and others better understand how to identify, manage, and prevent substance misuse in older adults. This publication describes the unique ways in which SUD signs and symptoms manifest in older adults; drug and alcohol use disorder (AUD) screening tools, assessments, and treatments specifically tailored for older clients' needs; the interaction between SUDs and dementia and other cognitive disorders; and strategies to help providers improve their older clients' social functioning and overall wellness—both of which are critical to successful recovery.

A consensus panel developed the TIP's content based on a review of the most up-to-date literature and on their extensive experience in the field of geriatric alcohol and drug addiction treatment. Other professionals also generously contributed their time and commitment to this publication.

This publication is an update of the original TIP. The content addresses many of the same key topics and messages, as well as new ones. Revisions reflect the most recent scientific knowledge, clinical advances, and guidance pertaining to preventing and treating substance misuse among older adults.

Overall Key Messages

Substance misuse in older adults is often overlooked and undertreated. In part, this is because of false beliefs among providers, professionals, and the general public that older adults do not develop or need treatment for drug and alcohol use disorders. Providers and professionals can benefit from an improved awareness about substance misuse in older clients, including how to approach screening, assessment, and treatment. Similarly, family members/caregivers can benefit from information and resources to help them recognize, prevent, and respond to substance misuse in their older loved ones.

Empirical evidence supports the use of SUD treatment for older adults—especially when tailored to their age-related needs. The notion that older adults are not interested in or do not respond well to treatment for substance misuse is simply untrue. In fact, when interventions are adapted to the physical, cognitive, and psychosocial needs of older clients, they are likely to be effective. It is critical that providers and professionals learn about available interventions and local resources so they can treat, serve, or otherwise refer older clients appropriately.

Like treatments and services, screening and assessment techniques can and should be adapted to older adults. Many instruments have been developed specifically to detect possible SUDs and common comorbid mental and physical conditions (e.g., depression, anxiety, pain) in this population. Age-appropriate screening tools and interventions are available for older adults struggling with alcohol use, illicit drug use, or nonmedical prescription medication use. Comprehensive assessments should explore other areas relevant to older adults and substance misuse, such as their trauma history and risk of current elder abuse, fall risk, cognitive decline, and ability to perform activities of daily living and other functions.

Nearly all of us will experience changes in our thinking as we age, but **substance misuse can potentially worsen normal age-related changes in cognition.** Further, older people already experiencing cognitive conditions, including dementia or mild cognitive impairment (MCI), may have difficulty using substances like alcohol and prescription medications safely and according to recommended guidelines.

Alcohol is the most widely used substance among older adults with substance misuse. It is vital that older adults and their family and caregivers receive information about moderate versus high-risk drinking, harmful effects of alcohol misuse, and available treatments for AUD.

Providers, professionals, and family and caregivers should be **especially watchful for signs and symptoms of nonmedical prescription drug use,** including that of opioids and benzodiazepines. Most older adults take at least one prescription medication, and many take more than one. This increases their risk for potentially dangerous drug–drug interactions and drug–alcohol interactions.

Older adults often experience reductions in their social network and social functioning as a part of normal aging, but among older individuals with substance misuse, this can be especially problematic. **Social support is a critical piece of achieving and sustaining long-term recovery from substance misuse for all people, including older adults.** Providers and professionals should be mindful of this and work closely with older clients to help them enhance the size and diversity of their social network, increase their social functioning, and engage in meaningful, recovery-oriented social activities (e.g., mutual-aid support programs, peer recovery support).

Recovery is just one part of wellness. To help older clients achieve true health and well-being, be sure to help them address any areas in which functioning may be lacking. This includes their physical functioning, mental health, emotional well-being, intellectual activities, spirituality, work or volunteer activities, and social life. **All of these aspects of wellness play a role in recovery** and in overall health.

Many older adults consume alcohol, but how does one know whether an older adult's alcohol use is a problem? Part of your role is to **provide a wide range of education and resources** to help older adults and their family or caregivers better understand the risk factors for, signs and symptoms of, and treatments and services available for alcohol misuse.

This TIP is divided into nine chapters designed to thoroughly cover all relevant aspects of the ways in which SUDs affect older adults and how providers, professionals, and family members and caregivers can offer treatment, services, support, and resources to help older adults prevent or overcome substance misuse.

Content Overview

The TIP is divided into chapters to make the material more accessible according to the reader's interests. Below is a summary of each TIP chapter's main messages and key content areas.

Chapter 1: Older Adults and Substance Misuse: Understanding the Issue

This chapter lays the foundation for understanding the scope and importance of substance misuse as a problem among older aged populations. It is for a variety of audiences (e.g., providers, professionals, administrators, informal and formal caregivers, family).

This chapter emphasizes the fact that **substance misuse is indeed a serious—and increasing—problem among older adults.** SUDs tend to be underrecognized by providers, professionals, and family and caregivers in part because of false beliefs that drug and alcohol addiction is only a "young person's disease" and that older clients are not interested and willing to engage in treatment or services. These myths contribute to low rates of diagnosis, treatment, and service provision among older persons and interfere with their chances for recovery. Most providers and professionals do not have specialized training in geriatric substance misuse, and most family members and caregivers do not know how to recognize and respond to these problems in older adults. This chapter helps fill these knowledge gaps by laying out the facts and statistics, many from large-scale surveys and empirical research, that underscore how problematic drug and alcohol addiction truly is for older adults.

In Chapter 1, you will learn that:

- Even though rates of drug and alcohol addiction are higher among adolescents and younger adults, SUDs can and do occur in older persons. **Substance misuse is not something that only occurs in younger people.** These ageist beliefs are a large reason why we see low rates of diagnosis and treatment/services in the older adult population.
- **Substance misuse among older individuals is very dangerous and can increase their risk of death and other physical harms.** Older persons are vulnerable to negative drug and alcohol interactions with prescription medications, adverse reactions from illicit drugs and prescription medications, and the harmful effects of alcohol.
- Not only are **rates of illicit drug use among older adults growing, rates of co-occurring mental disorders are also high.** As the number of older individuals in the U.S. population increases, the need for treatment providers and programs that understand and can respond to the needs of older adults with SUDs also will likely rise over time.
- **Older adults with SUDs are more likely to misuse alcohol than any other substance.** This is concerning because older individuals' bodies do not metabolize alcohol as efficiently as those of younger people, increasing their risk of cognitive and physical problems, like confusion and falls.
- **Most older adults take at least one medication, and many take more than one.** This makes substance use and misuse even more dangerous because of potentially deadly or otherwise harmful interactions between prescription medications and drugs and alcohol. Like their younger counterparts, some older adults do engage in nonmedical prescription medication use, including nonmedical use of opioids and benzodiazepines.
- **Providers and professionals may struggle to identify SUDs in older clients because symptoms can be hard to recognize and do not necessarily mirror diagnostic criteria.** For example, changes in thinking attributable to alcohol misuse may appear similar to normal age-related changes in cognition.
- **Although the idea that older adults are unwilling to seek treatment or services for substance misuse is false, certain barriers can make this population less likely to seek treatment.** These barriers include negative attitudes among providers, professionals, or family/caregivers; denial on the part of the older adult; lack of knowledge about substance misuse among family and caregivers; and lack of provider awareness about available and effective treatment and services.
- **Multiple treatment approaches for SUDs exist that are effective for older adults.** These include screening, brief intervention, and referral to treatment; brief structured treatment; patient education; relapse prevention techniques; formal SUD treatment programs; and pharmacotherapy (e.g., methadone, buprenorphine, naloxone).

Chapter 2: Principles of Care for Older Adults

This chapter describes guiding principles for evidence-based, effective, and safe treatments and services for older adults with substance misuse. This chapter will most benefit providers.

Older adults are a diverse and unique population, and **their SUD treatment and service needs typically differ somewhat from those of younger adults.** Providers should understand developmental differences but also generational differences (e.g., baby boomers versus earlier cohorts) among their older clients. Age-sensitive and age-specific interventions can help increase older adults' chances of achieving and sustaining long-term recovery. The treatment/service environment itself also should be adapted to this population, for example, through organization-wide training and encouragement of staff attitudes responsive to older clients' needs. Consider each older client's cultural background, gender, and age of onset of an SUD, all of which can influence treatment needs and recovery outcomes.

In Chapter 2, you will learn the following:

- **To give older clients the best opportunities to access and benefit from substance use treatment and services, you must acknowledge, respect, and respond to differences among populations of older individuals.** This includes differences in generation, age of and reason for substance misuse onset, gender, recovery needs and wishes, attitudes about substance use/misuse, available support network, and more. In short, providers must remember that no two older clients are alike.
- **Organizations should create a treatment/service environment that gives older clients the best chances for successful recovery.** This means considering how the physical environment, as well as staff skills, services, abilities, and policies, can be tailored to overcome any age-related barriers.
- Older adults are diverse in gender, race/ethnicity, and sexual orientation. Bias and discrimination can occur as easily as in any other age group. **Take time to learn how such diversity may influence your clients' late-life substance misuse, health disparities, and access to care.**
- Early identification, education, and intervention, even if brief and informal, are important because substance misuse in older adults is often unrecognized by older adults themselves, as well as by their family members, friends, and healthcare and social service providers. As a provider, **you should learn the signs and symptoms of SUDs in older adults and be prepared to respond appropriately when they appear.** This includes performing routine screening and assessment for substance misuse. For older adults uninterested in abstinence, provide health risk reduction services, such as education on the health benefits of reducing alcohol use.
- **Person-centered care is the preferred approach for this population** and emphasizes older clients' values, needs, and preferences from among a menu of care options.
- Age-sensitive approaches include those that are tailored to older clients' physical needs (e.g., difficulties with mobility, hearing, vision, or a combination of these), cognitive problems (e.g., memory and attention difficulties), learning needs (e.g., using a slower pace, repeating information), and age-related preferences (e.g., desiring age-specific rather than mixed-age group treatment).
- **Investing time and money in developing an age-sensitive workforce throughout your organization is important.** Staff recruitment, hiring, retention, supervision, and professional development strategies should include a focus on understanding evidence-based approaches that are effective and appropriate for older adults.
- **Older adults with substance misuse can benefit greatly from social support and community resources.** Keep on hand a listing of resources and referrals, and help older clients access and engage in these services.
- **Including caregivers throughout treatment and services (as appropriate) and providing them with education and resources (including access to case managers) can improve older clients' recovery chances.** Not only will this

help them better understand the nature of SUDs and the recovery process, it can help reduce caregiver burden and stress, which, if unaddressed, can affect their own health as well as that of the older adult with the SUD.

Chapter 3: Identifying, Screening for, and Assessing Substance Misuse in Older Adults

This chapter addresses how, when, and why to use screening and assessment for substance misuse in older clients. This chapter will most benefit behavioral health service providers, social service providers, and other healthcare professionals and paraprofessionals.

Identification, screening, and assessment are critical steps to linking older adults with substance misuse to needed treatment and services. Older adults' signs and symptoms of SUDs can be difficult to spot, however. **By learning the steps to accurate and effective screening and assessment, you increase the chances of older adults receiving timely and appropriate care.** This means taking a comprehensive approach that not only focuses on specific drug and alcohol use disorders but also on related conditions that influence (or are influenced by) substance misuse. These conditions include co-occurring mental disorders (e.g., depression, anxiety), certain physical problems (like chronic pain and sleep disorders), cognitive impairment, falls, trauma, and abuse (history and current experiences), and everyday functioning.

In Chapter 3, you will learn the following:

- Screening and assessment for SUDs in older persons can be challenging because the signs and symptoms are not necessarily the same as those in younger adults and do not always mirror diagnostic criteria. To ensure proper and timely identification of problems, **you should learn how to recognize and overcome these challenges.**
- As a provider, **you should regularly screen your older clients for substance misuse, at least annually.** Also consider screening if the client displays signs or symptoms that are concerning, if the client or family/caregiver reports substance-related difficulties, or if you otherwise suspect substance misuse may be present.
- Numerous screening instruments are available that have been developed for or tested and approved for use with older persons. These include instruments to help you screen for alcohol misuse, illicit drug use, and nonmedical prescription medication use. Older adult screeners are also available to help you explore related areas, such as depression, posttraumatic stress disorder (PTSD), anxiety, cognition, pain, and daily functioning.
- **When communicating screening results, you should praise clients for findings that indicate abstinence, and follow up on findings that indicate substance-related problems.** Be sure to also occasionally rescreen older clients even if their findings suggest no problems are present.
- **You should follow up on screening that indicates a potential substance-related problem by conducting an assessment.** Brief assessments can occur immediately after screening. More thorough, comprehensive assessments are lengthier and may require a separate appointment.
- Comprehensive assessment for SUDs is a multistep process that will help you determine whether substance misuse is truly present and differentiate SUDs from possible co-occurring disorders (CODs), physical conditions common in older populations, and signs of normal aging.
- You should fully explore older clients' psychological, medical, family, vocational or retirement-related, social, sexual, financial, legal, substance use, and substance-related treatment histories. Also ask about older clients' fall risk, abuse potential, skills and abilities, and functional status.
- **Not all clients who screen positive will need formal substance use treatment. For older clients with or at risk for mild or moderate substance misuse, a brief intervention may be sufficient (e.g., education, motivational interviewing). For older adults with moderate-to-severe SUDs, formal treatment may be necessary.**

Chapter 4: Treating Alcohol Misuse in Older Adults

This chapter discusses key aspects of alcohol misuse and the screening, assessment, and treatment of/services for binge drinking and AUD. It will most benefit healthcare, behavioral health, and social service providers working with older adults (physicians, nurse practitioners, physician assistants, nurses, social workers, psychologists, psychiatrists, mental health counselors, alcohol and drug counselors, and peer providers).

Alcohol is the most commonly used substance among older individuals with an SUD or substance-related problems. Although widespread screening is an effective method of detecting alcohol-related problems in this population, many providers and professionals fail to screen because of false beliefs (e.g., that older people do not experience AUD or would not be interested in treatment) and lack of knowledge about the importance of widespread screening.

For older clients in need of treatment, services, referrals, or some combination thereof, you should **use age-sensitive and age-specific approaches to care that respect and respond to the unique needs of older adults.** A wide range of interventions are available to draw from, including pharmacologic and nonpharmacologic options.

In Chapter 4, you will learn about:

- **The ways in which older adults are at risk for harm from alcohol misuse,** including age-specific health effects as well as negative co-occurring mental and social conditions.
- **The need to screen all older adults for alcohol misuse and alcohol-related problems.** Screening is especially important in primary care and emergency department settings, where older adults are often seen for co-occurring conditions like chronic pain and falls. Screening is necessary in certain situations, like following major life changes (e.g., retirement [especially if forced or unwanted], loss of a significant other), when starting a new medication, and as part of an annual physical exam.
- **Measures developed and approved for use with older populations,** such as the Alcohol Use Disorders Identification Test and the Short Michigan Alcoholism Screening Test-Geriatric Version.
- The ways to respond appropriately to older clients who screen positively for alcohol misuse or alcohol-related problems. As a provider, **remember that not all diagnostic criteria for AUD apply to older adults in the same way they apply to younger adults.** For instance, older adults may report reduced socialization, but this is common with aging and not necessarily a sign that drinking is interfering with social abilities.
- The ways in which **prescription medications can interact negatively with alcohol.** This is critical information for providers and professionals because most of your older clients will be taking at least one prescription medication. Older adults taking numerous prescriptions or taking certain medications (e.g., benzodiazepines, antidepressants, blood thinners) are especially at risk for potentially harmful alcohol–drug interactions.
- **The steps to guiding older clients through the continuum of care** for substance misuse, including brief interventions, prevention strategies, outpatient care, inpatient rehabilitation, follow-up services, referrals, and recovery management.
- **Adapting treatment and services for age-specific needs of older adults,** including clinical approaches (e.g., nonconfrontational and supportive approaches), treatment and service structure (e.g., flexible scheduling, shorter sessions), and content needs (e.g., focus on increasing behavioral change, quality of life, and social connectedness). You also should be aware of pharmacologic and nonpharmacologic interventions and their effectiveness and safety for use with older adults.

Chapter 5: Treating Drug Use and Prescription Medication Misuse in Older Adults

This chapter discusses age-appropriate interventions and services for older adults with substance misuse (non-alcohol-related), including illicit drug use and nonmedical prescription medication use. This chapter will most benefit

healthcare, behavioral health, and social service providers who work with older adults (e.g., physicians, nurse practitioners, physician assistants, nurses, social workers, psychologists, psychiatrists, mental health counselors, alcohol and drug counselors, peer recovery support specialists).

Older adults can and do develop SUDs involving illicit drugs and nonmedical use of prescription medication. Many older adults take multiple medications and may be unaware of potential harms arising from substance misuse (e.g., overdose; dangerous interactions with alcohol and with other medications; increased risk of physical, mental, and cognitive problems). Age-specific, evidence-based treatments and services are available for older clients with these conditions, including SUDs involving opioids, cannabis, stimulants, and benzodiazepines and other sedative-hypnotics.

There is no "wrong door" by which older adults access care for drug addiction, and as a provider, you should ensure education, formal and informal treatment, services, and referrals are available throughout the entire course of care, from prevention through continuing care and recovery management.

In Chapter 5, you will learn that:

- Prescription medication misuse can be unintentional, underscoring the importance of **educating your older clients about how to take medication correctly** (including avoiding harmful interactions).
- **Older adults are at risk for opioid addiction,** given the high prevalence of chronic pain in this population. Opioid overdose prevention strategies, detoxification, and medication can be used safely and effectively with this population.
- Illicit substance use (e.g., opioids, cannabis, stimulants) does occur among older adults and can be treated using behavioral and pharmacological methods.
- **Routine screening and assessment will help you detect substance misuse early and accurately.** Thoroughly explore not just the client's substance misuse (current and past) but also other health behaviors (e.g., exercise, diet), changes in physical and mental functioning, and major life events that may put the person at risk for substance misuse (e.g., retirement, moving, loss of a loved one).
- A full assessment should cover topics like co-occurring medical and mental conditions, sleep problems, occurrence of pain, fall risk, and daily functioning.
- **Diagnostic criteria for SUDs may not fully apply to older clients.** Older clients' substance-related signs and symptoms may differ from those in the diagnostic criteria and in younger adults.
- **Older adults with SUDs can benefit from a wide range of age-sensitive and age-specific treatment and services across the continuum of care,** including prevention strategies, early and brief interventions, formal inpatient and outpatient treatment, and recovery management techniques.
- **Mutual-aid support programs and family involvement are important components of the continuum of care** for older adults with SUDs. Social support and connectedness are often lacking in older adults and can help those with substance misuse achieve and sustain recovery, optimal functioning, and good quality of life.

Chapter 6: Substance Misuse and Cognitive Impairment

This chapter outlines the ways in which substance misuse can affect (and be affected by) declines in thinking, including the occurrence of dementia. This chapter will most benefit behavioral health, healthcare, and primary care service providers and prevention specialists who offer direct care to clients in behavioral health and healthcare settings and care for older adults who misuse substances.

Changes in thinking, like difficulties with memory, attention, and learning, are a normal part of aging for most of us. But for older adults with substance misuse, these changes in thinking can be more severe and may develop faster than in the absence of substance misuse. **Substance misuse can increase the risk of certain cognitive problems and can make managing those cognitive problems more difficult.** Furthermore, problems with thinking may make it harder for some older adults to remember how to take

prescription medication appropriately or keep track of their alcohol consumption to ensure it does not exceed recommended guidelines. In other words, **cognitive disorders can increase older adults' chances of experiencing substance-related problems.** The key to offering timely and effective treatment is to engage in routine screening and assessment to detect potential cognitive impairment, like dementia and MCI, as soon as possible.

There are **many age-appropriate interventions and services you can offer** (or offer referrals for) to help maintain or improve older clients' mood, functioning, and quality of life. **Involving caregivers is also important to make sure clients struggling with their thinking take prescription medication correctly, avoid or consume safe amounts of alcohol, avoid illicit drugs, and stay engaged in treatment and services.**

In Chapter 6, you will learn about:

- Facts that show **substance misuse can and does occur in older adults,** particularly alcohol misuse.
- The latest research on the **effects of substances and certain medications (e.g., benzodiazepines) on cognition** and brain functioning in general.
- **The link between substance misuse and the risk of developing cognitive disorders in the future,** such as dementia and MCI.
- **The many mental disorders/symptoms that co-occur with substance misuse and that negatively influence thinking,** such as depression and depressive symptoms, anxiety, and PTSD and trauma. If offering treatment or services for older clients' substance misuse, it is critical to screen and assess for these mental disorders/symptoms because, if present and untreated, cognitive problems may persist.
- **Screening instruments developed for and tested in populations of older individuals are available.** These tools will help you detect possible co-occurring mental disorders as well as cognitive impairment.
- The numerous **interventions for older clients with substance misuse and co-occurring behavioral health and cognitive disorders,** including education, drug and alcohol counseling, brief counseling, referral to mutual-aid support programs and peer-recovery programs, and other interventions that do not involve pharmacotherapy.
- Why **including caregivers is essential for successfully treating older adults with substance misuse and co-occurring dementia or MCI.** Additionally, your role is to help ensure caregivers have the support and resources they need to maintain their own health and well-being (including avoiding substance misuse themselves).

Chapter 7: Social Support and Other Wellness Strategies for Older Adults

This chapter outlines ways to help older clients with substance misuse leverage social supports and other wellness strategies to improve their chances of achieving and maintaining long-term recovery. This chapter will most benefit healthcare, behavioral health, and social service providers who work with older adults (physicians, nurse practitioners, physician assistants, nurses, social workers, psychologists, psychiatrists, mental health counselors, alcohol and drug counselors, and peer recovery support specialists).

Strong social networks are an essential part of older adults' health and well-being. You can help **increase older adults' chances of recovery by offering interventions, services, and resources that target social supports and other aspects of wellness,** like health literacy, illness management, and relapse prevention. Social isolation is unfortunately common among many older individuals and has been linked to risky behaviors, including substance misuse, as well as poor physical, cognitive, and mental health. But you can help older clients enhance their social functioning as a part of recovery treatment/services through interventions that expand your clients' social network, increase their feelings of connectedness, promote neighborhood/community supports, and engage their family members in recovery activities.

In addition to addressing socialization, **do not overlook other areas of health and well-being that may help enhance recovery efforts and**

improve quality of life. This includes the older adult's physical health, emotional well-being, spirituality, vocational or volunteer work, and more.

In Chapter 7, you will learn that:

- Declines in social functioning are a normal part of aging for many individuals, but you can (and should) help older clients with substance misuse do something about this. **By helping older adults increase and enhance their social network and feelings of connectedness, you are at the same time also helping them improve their chances of overcoming substance misuse.**
- You should help older clients with substance misuse expand the size and diversity of their social network, engage neighborhood and community supports, and involve family members or caregivers in their recovery. **Be sure to offer recovery-specific social supports, like mutual-aid support programs and peer support programs,** among your services and referral options.
- Area Agencies on Aging are wonderful sources of information, support, and services to help your older clients engage in social support and other healthy activities. Online social networks, though often associated only with adolescents and young adults, also are a potential useful resource for older adults. Explore whether your older clients are interested in and need help accessing social media and related technologies; they can be an asset for older individuals who experience barriers to establishing or growing a social network of support.
- In addition to focusing on social functioning, **help older clients with substance misuse establish all-around wellness by addressing multiple areas of functioning, like their physical health, spirituality, emotional health, finances, work, and cognition.** All of these can play an important role in recovery.
- Wellness recovery activities keep your older clients engaged in all aspects of life, health, and well-being. **Brainstorm ideas together and link your clients to a wide range of wellness activities,** like exercising, joining a spiritual or religious fellowship, creating a safe and welcoming living environment, enrolling in adult education or senior college courses, and volunteering.
- Complementary therapies and activities, like animal-assisted therapy, may help your older clients improve certain aspects of their physical, social, and emotional health. But be sure to discuss with them both the benefits and potential limitations of these strategies.
- Older adults should **learn self-management techniques to independently monitor and improve their health.** This is important for addressing chronic illnesses, like heart disease and chronic pain, which often affect older individuals and, if unmanaged, can lead to significant impairments in functioning and quality of life. By learning to independently track and manage their symptoms, clients feel empowered and gain control of their health. This also applies to recovery; by continuing to engage in recovery activities, use relapse prevention techniques, and rely on social supports, **older clients can strengthen their resilience and maintain a sense of control over their recovery.**

Chapter 8: Drinking as an Older Adult: What Do I Need To Know?

This chapter focuses on older adults' alcohol consumption and key facts and information they (and family members/caregivers) should know about alcohol use and misuse. This chapter is for older adults who drink (including those with questions about how much they should drink), their caregivers, and their families.

Many older adults drink alcohol but do not develop alcohol misuse or other alcohol-related problems. Understandably, they may have questions about what defines a "safe" level of consumption; the signs, symptoms, and effects of alcohol misuse; and how, why, and when to seek professional treatment or services. **Family and caregivers should be similarly armed with this information** so they can offer support to an older significant other in need of care for alcohol misuse.

In Chapter 8, you will learn about:

- Guidelines that define **"moderate" and "at-risk/high-risk" amounts of alcohol for**

adults, including what counts as one drink. Keep in mind that what is high risk for older adults is often different than what is high risk for younger individuals, because older adults experience the negative effects of alcohol at lower amounts.

- The **causes of older adults' alcohol misuse,** such as certain stressful major life events (e.g., forced retirement, death of a significant other), increased isolation, physical disability, and boredom/lack of meaningful activities or hobbies.
- The **signs and symptoms of alcohol misuse in older adults,** including cognitive, physical, emotional, social, and behavioral conditions.
- Aspects of alcohol use that can lead to or worsen health conditions.
- How to make sense of media reports that suggest light or moderate drinking is healthy.
- Which medications can have harmful interactions with alcohol and what those interactions include.
- Tips and strategies for older adults who want to try to **manage their alcohol misuse on their own** and how to tell when it is time to seek help from a professional.
- The **steps that occur when a person accesses professional treatment or services,** such as screening, assessment, and follow-up visits. Also, you will learn about treatment options across the continuum of care, including formal and informal interventions, and **how to select the best-fitting treatment.**
- Ways to engage family and friends in support of recovery, as well as self-motivation strategies.
- **Vital information for family and caregivers,** like warning signs of alcohol misuse, helping an older adult access professional care, and the importance of self-care.

Chapter 9: Resources for Treating Substance Use Disorder in Older Adults

Chapter 9 provides a compendium of resources described in all other portions of the TIP, plus additional resources.

TIP Development Participants

Consensus Panel

Each Treatment Improvement Protocol (TIP) consensus panel is a group of primarily nonfederal addiction-focused clinical, research, administrative, and recovery support experts with deep knowledge of the TIP's topic. With the Substance Abuse and Mental Health Services Administration's (SAMHSA) Knowledge Application Program (KAP) team, they develop each TIP via a consensus-driven, collaborative process that blends evidence-based, best, and promising practices with the panel's expertise and combined wealth of experience.

Note: The information below indicates each participant's position and affiliation when the panel was convened and may not be current.

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Stakeholders represent a cross-section of key audiences with a deep interest in a TIP's subject matter. Stakeholders review and comment on the draft outline and supporting materials for the TIP to ensure that its focus is clear, its stated purpose meets an urgent need in the field, and it will not duplicate existing resources produced by the federal government or other entities.

Note: The information below indicates each participant's position and affiliation when the meeting was convened and may not be current.

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Chapter 1—Older Adults and Substance Misuse: Understanding the Issue

KEY MESSAGES

- Estimated rates of substance misuse in older adults vary widely. Substance misuse by this population is underrecognized and undertreated.
- Substance misuse can be very dangerous for older adults. They are affected by substances differently than younger adults, and smaller amounts of substances can have more of an impact. Substance misuse by older adults can worsen any chronic medical conditions they may have. Older adults also often take more than one medication, which increases their odds of being exposed to harmful drug interactions.
- It is never too late to stop misusing substances, no matter one's age. Treatment for older adults is available. Providers need to learn about effective interventions for older adults so that they can offer treatment or referrals for treatment quickly and appropriately.

Chapter 1 of this Treatment Improvement Protocol (TIP) benefits all audiences (providers, supervisors, administrators, older adults, caregivers, and family members). It summarizes the extent of substance use and substance misuse, including substance use disorders (SUDs), among older adults. Chapter 1 will help you understand the current situation and trends to gain an overall, broad understanding of this critical issue. This TIP is for all audiences who provide care and support to older adults, including older adults themselves as well as individuals who are connected to an older adult, such as family members, friends, formal and informal caregivers, behavioral health service and healthcare providers, and aging services providers.

Organization of This TIP

Chapter 1 contains information of value to all audiences: it is an overview of substance misuse and addiction treatment among older adults. Chapter 1 also defines terms and summarizes issues to help clients and providers communicate more clearly with each other.

Exhibit 1.1 defines important terms this TIP uses.

EXHIBIT 1.1. Key Terms

- **Addiction*:** The most severe form of SUD, associated with compulsive or uncontrolled use of one or more substances. Addiction is a chronic brain disease that has the potential for both recurrence (relapse) and recovery.
- **Age-specific:** Treatment approaches and practices specifically developed for older adults (e.g., an older adult specialty group in a mixed-age SUD treatment program).
- **Alcohol misuse:** The use of alcohol in any harmful way, including heavy drinking, binge drinking, and alcohol use disorder (AUD).
- **At-risk/high-risk drinking:** Drinking alcohol in excessive amounts. This definition encompasses both binge drinking and heavy drinking. Additionally, any alcohol consumption is considered risky when carried out by individuals with certain medical conditions that are worsened by alcohol, those taking medicine that can interact harmfully with alcohol, those driving a car or engaged in other activities that require alertness, or people recovering from AUD.[1,2] Note that for purposes of this TIP, at-risk drinking and high-risk drinking are synonymous and either term is acceptable to describe an older adult's drinking patterns.
- **Binge drinking:** A drinking pattern that leads to blood alcohol concentration levels of 0.08 grams per deciliter or greater. This usually takes place after four or more drinks for women and five or more drinks for men.[3,4] However, older adults are more sensitive to the effects of alcohol, and treatment providers may need to lower these numbers when screening for alcohol misuse.[5] Additionally, other factors such as weight, decrease in enzyme activity, and body composition (e.g., amount of muscle tissue present in the body) can also affect alcohol absorption rates.
- **Caregivers:** Informal caregivers provide unpaid care. They assist others with activities of daily living, including health and medical tasks. Informal caregivers may be spouses, partners, family members, friends, neighbors, or others who have a significant personal relationship with the person who needs care. Formal caregivers are paid providers who offer care in one's home or in a facility.[6] Most older adults do not need caregivers and are as able to address their own needs as younger adults, whether or not substance misuse is a factor in their lives.
- **Drug–drug interaction:** The interaction of one substance (e.g., alcohol, medication, an illicit drug) with another substance. Drug–drug interactions may change the effectiveness of medications, introduce or alter the intensity of side effects, and increase a substance's toxicity or the concentration of that substance in a person's blood. Potentially serious interactions can also occur with certain foods, beverages, and dietary supplements.[7]
- **Heavy drinking:** Consuming five or more drinks for men and four or more drinks for women in one period on each of 5 or more days in the past 30 days.[8]
- **Illicit substances:** Illicit substances include cocaine, heroin, hallucinogens, inhalants, methamphetamine, and prescription medications that are taken other than as prescribed (e.g., pain relievers, tranquilizers, stimulants, sedatives).
- **Moderate drinking:** According to the 2015–2020 *Dietary Guidelines for Americans*, moderate drinking is defined as up to two drinks per day for men and up to one drink per day for women.[9,10] However, the Centers for Disease Control and Prevention (CDC) notes that these numbers apply to any given day and are not meant as an average over several days.[11] Additionally, individuals who don't metabolize alcohol well may need to consume even lower quantities. Some people, particularly those with certain alcohol-related illnesses or engaging in tasks requiring concentration, should not consume alcohol at all. The *Dietary Guidelines* stipulate that those who don't drink should not begin drinking for any reason.[12]

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Continued

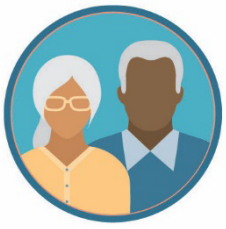
- **Psychoactive substances:** Substances that can alter mental processes (e.g., cognition or affect; in other words, the way one thinks or feels). Also called psychotropic drugs, such substances will not necessarily produce dependence, but they have the potential for misuse or abuse.[13]
- **Recovery*:** A process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential. Even individuals with severe and chronic SUDs can, with help, overcome them and regain health and social function. This is called remission. When those positive changes and values become part of a voluntarily adopted lifestyle, that is called being in recovery. Although abstinence from all substance misuse is a cardinal feature of a recovery lifestyle, it is not the only healthy, prosocial feature.
- **Relapse*:** A return to substance use after a significant period of abstinence.
- **Remission:** A medical term meaning a disappearance of signs and symptoms of the disease or disorder. The fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) defines remission as present in people who previously met SUD criteria but no longer meet any SUD criteria (with the possible exception of craving).[14] Remission is an essential element of recovery.
- **Sensitivity:** The extent to which a substance affects someone physiologically. Aging causes people to develop increasing sensitivity to substances. As a person ages, a given dose of a substance will have a greater physiological impact than it did when the person was younger.
- **Substance misuse*:** The use of any substance in a manner, situation, amount, or frequency that can cause harm to users or to those around them. For some substances or individuals, any use would constitute misuse (e.g., underage drinking, injection drug use).
- **Substance use disorder*:** A medical illness caused by repeated misuse of a substance or substances. According to DSM-5,[15] SUDs are characterized by clinically significant impairments in health and social function, and by impaired control over substance use. They are diagnosed through assessing cognitive, behavioral, and psychological symptoms. SUDs range from mild to severe and from temporary to chronic. They typically develop gradually over time with repeated misuse, leading to changes in brain circuits governing incentive salience (the ability of substance-associated cues to trigger substance seeking), reward, stress, and executive functions like decision making and self-control. Multiple factors influence whether and how rapidly a person will develop an SUD. These factors include the substance itself; the genetic vulnerability of the user; and the amount, frequency, and duration of the misuse. Note: A severe SUD is commonly called an addiction. A mild SUD is generally equivalent to what previous editions of DSM called substance abuse; a moderate or severe SUD is generally equivalent to what was formerly called substance dependence.

* The definitions of all terms marked with an asterisk correspond closely to those given in *Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health*. This resource provides a great deal of useful information about substance misuse and its impact on U.S. public health. The report is available online (https://addiction.surgeongeneral.gov/sites/default/files/surgeon-generals-report.pdf).

Who Can Benefit From This TIP and How?

The demand for services to address substance misuse in older adults is increasing. All healthcare, behavioral health, and aging service/long-term care providers need training in working on substance misuse–related problems with older adults, their families and friends, and formal and informal caregivers.[16,17] Such providers include primary and specialty healthcare providers, case workers, social workers, psychologists, drug and alcohol counselors, peer recovery support specialists, clergy, providers of aging-related services, and direct care workers.

~23% of SUD treatment programs in the U.S. offer services tailored to **OLDER ADULTS.**[18]



Caregivers and families need resources to help navigate initial identification, screening, assessment, and treatment options for older people who misuse substances or have SUDs. Key societal changes have made this a critical time to address substance misuse in the aging population:

- Substance use and SUDs among older adults are rising:
  - **Illicit drug use is more common among current older adults than among previous generations of older adults.** Current 65-and-older individuals and aging baby boomers (those born between 1946 and 1964) are more likely than members of previous generations to use illicit drugs.
  - **SUDs among older adults are expected to continue increasing.** Rapidly growing numbers of older adults will need substance misuse prevention and counseling, and sometimes SUD treatment services, particularly to address nonmedical use of prescription medication.
- **Substance use and chronic health conditions have compound effects on older individuals.** Chronic health conditions in older adults can complicate the effects of their substance use, increasing their need for comprehensive, integrated services.[19] Likewise, substance use can complicate the management of chronic conditions.[20]
- **Older adults are increasingly willing to seek services.** Baby boomers tend to view addiction treatment as more acceptable than previous generations have.[21,22] As baby boomers continue to enter old age, the number of older people needing treatment will continue to increase—and so therefore will **the overall percentage willing to seek treatment.** However, feelings of shame and stigma linked to SUD treatment settings cause many older adults to seek addiction care from providers who do not specialize in addiction treatment, including primary care and emergency department providers.[23]
- **Older adults are affected by co-occurring mental disorders and SUDs.** In the 2019 National Survey on Drug Use and Health (NSDUH):[24]
  - 1.5 percent of Americans ages 50 and older (1.7 million) had any past-year mental illness and SUD; an estimated 0.5 percent (607,000) reported both a past-year serious mental illness (SMI) and a past-year SUD.
  - 37 percent with a past-year SUD also had any mental illness; 13 percent, an SMI.
  - 11 percent of older adults with any mental illness in the past year also had an SUD.
  - 18 percent of older adults with an SMI in the past year also had an SUD.
- **Few providers specialize in dealing with geriatric substance use.**

Much research has been done with older adult populations, but guidance has lagged on implementing research findings in ways that will improve services. **This TIP fills gaps in the field by focusing on ways to implement and improve the delivery of SUD treatment based on evidence and promising practices specifically for older adults.** Current gaps include:

- **A science-to-service gap in resources for providers.** Few service improvement resources focus on tailoring treatment services for older clients with SUDs who may also have co-occurring physical disabilities or mental disorders.
- **A gap in addiction treatment resources for clients, their families and friends, and caregivers.** Free, user-friendly publications that inform older clients and those close to them about substance use and addiction services are difficult to find.

When reading this TIP, remember that some misuse is accidental or inadvertent. For example, individuals who are unaware of a medication's potential to cause dependence or other harms may consume more than prescribed. Other individuals may have difficulty in monitoring when they have taken their medication and take more than the recommended dose. Some individuals may become substance dependent even though they take their medication as prescribed. The pathway to misuse helps guide the selection of interventions and, if necessary, treatment. Accidental misuse stills requires a response.

Overview and Scope of the Substance Misuse Problem

Older Adults Today

The Older Adult Population

The older adult population is becoming more diverse. In the coming decades, the percentage of non-Hispanic White older adults in the U.S. population is projected to drop, whereas the percentages of Hispanics and races other than White are expected to increase. Gender ratios are also changing. The gap between the number of women and men is beginning to narrow because of the increased life expectancy of men, especially among men ages 85 years and older.[25]

Healthcare and behavioral health service providers and caregivers must understand this diversity to provide culturally responsive services, including interventions and treatments for alcohol and other substance misuse.[26] Providers should also recognize differences between generations of older adults that may make some older adults more willing than others to discuss addiction and mental illness with their healthcare providers.

The number of older adults with SUDs is increasing. The U.S. population of older adults increasingly consists of baby boomers. Baby boomers came of age at a time when substance use tended to be more culturally acceptable, making them more open to and less judgmental about substance use than prior generations. (Not all subgroups of baby boomers experienced this openness and freedom from judgment about substance use, such as racially and ethnically diverse populations.) Because of baby boomers' exposure to drugs and alcohol at a younger age, their generation has higher rates of past or current SUDs compared with previous generations.[27,28]

These changes in older adult demographics will have major consequences for SUD prevention and treatment programs. Shifts in the older population will strain retirement systems, healthcare facilities, and other services. A rapidly increasing number of older adults will need comprehensive, integrated, age-specific SUD screening, assessment, and treatment services.[29]

Substance Misuse Among Older Adults

Substance misuse in older adults is dangerous and potentially deadly. They have increased vulnerability to alcohol and to adverse drug reactions (whether the drugs are prescription or illicit)[30] because of physiological and mental changes associated with aging. Such changes include slower metabolism and lower body fat. This increased vulnerability makes identifying SUDs in older adults especially critical.

SUDs do occur in older adults, although less often than in younger people. Of adults ages 65 and older in the 2012–2013 Wave of the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC III):

- 2.3 percent had a 12-month AUD, and 13.4 percent had a lifetime AUD.[31]
- 0.8 percent had a past-year drug use disorder, and 2 percent had any lifetime drug use disorder.[32]

Substance misuse rates in older adults vary by gender, race/ethnicity, and education level:

- In NESARC III, past-year cannabis use was reported by about 4 percent of non-Hispanic Whites, 6 percent of non-Hispanic Blacks, 3 percent of Hispanics, 0.7 percent of Asians, and 11 percent of American Indians/Alaska Natives ages 50 and older.[33]
- In the 2004–2005 Wave of NESARC, past-year prevalence of any SUD in adults 55 and older was:[34]
  - 3.9 percent for non-Hispanic Whites, 3.6 percent for African Americans, 3.3 percent for Hispanics, 3.0 percent for American Indians/Alaska Natives, and 1.7 percent for Asian/Native Hawaiian/other Pacific Islanders.
  - 2.9 percent for individuals with less than a high school education, 3.1 percent for individuals with a high school education, and 4.5 percent for those with at least some college.

Older adults are often willing to seek help for substance misuse or SUDs, as they are tending to take more accepting views about addiction treatment.[35] Yet negative attitudes (sometimes termed "ageism") about older adults' ability to recover from addiction persist, despite evidence that treatment is effective in reducing or stopping substance misuse and improving older adults' health and quality of life.[36,37,38,39,40,41]

Substance misuse, including SUDs, among older adults often goes unrecognized and untreated. Societal norms, values, and biases play a large role in this phenomenon. Some people hold the ageist false belief that SUDs do not exist or need no treatment in this age group. Others—even some healthcare providers—mistake SUD symptoms for normal age-related changes. Some healthcare providers may focus more on older adults' reports of physical/medical complaints. Similarly, some older adults may deny or hide their substance use-related problems from their healthcare providers.[42]

Current cultural biases tend to minimize the scope of substance misuse among older adults, but **this public health concern is more urgent than ever.**

Prevalence and Characteristics of Substance Use Among Older Adults

Alcohol

Alcohol is the substance that older adults use and misuse most frequently. The 2019 NSDUH[43] found that, in individuals ages 65 and older, an estimated 5.6 million (10.7 percent) engaged in past-month binge alcohol use and an estimated 1.5 million (2.8 percent) engaged in past-month heavy alcohol use.

The survey also showed that 903,000 adults ages 60 to 64 and 1.04 million adults ages 65 and older met *Diagnostic and Statistical Manual of Mental Disorders,* 4th Edition (DSM-IV) criteria for alcohol dependence or abuse in the past year. These numbers were similar among slightly younger groups of older adults, with 939,000 adults ages 50 to 54 and 1.02 million adults ages 55 to 59 meeting DSM-IV criteria for alcohol dependence or abuse in the past year.

Exhibit 1.2 shows what constitutes a standard drink by type of alcohol.

EXHIBIT 1.2. What Is a Standard Drink?

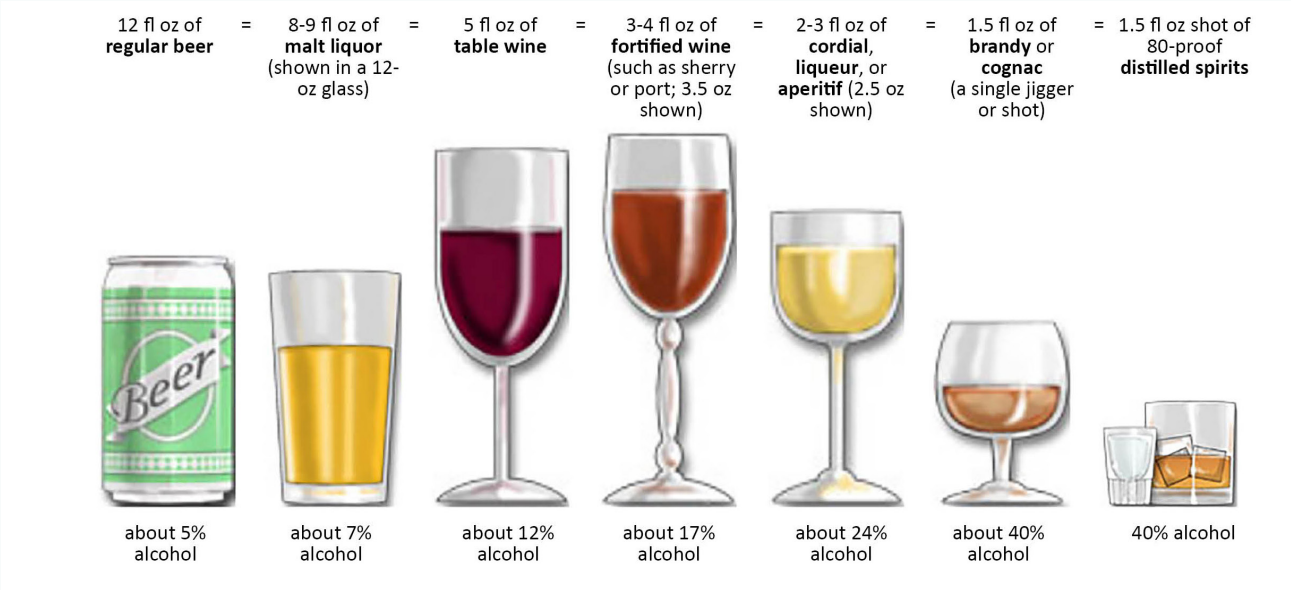


Image adapted from material in the public domain.[44]

In healthcare settings, up to 15 percent of older patients may meet criteria for at-risk drinking.[45,46,47] For example, one study[48] of 24,863 adults ages 65 and older in military and civilian healthcare clinics found that 9.2 percent of men and 2.1 percent of women regularly drank in excess of federal guidelines. The study found that 21.5 percent of patients drank moderately, 4.1 percent engaged in at-risk drinking, and 4.5 percent drank heavily or engaged in binge drinking. Among those who drank moderately, 10.2 percent had engaged in heavy episodic drinking one to three times in the past 3 months.

The *Dietary Guidelines* define moderate drinking as consuming up to one drink a day for women and up to two drinks a day for men. Exceeding these numbers can lead to high-risk drinking. Older adults who drink at all in the following situations are also engaging in high-risk drinking:[49]

- While taking certain prescription medications (such as opioids or sedatives)
- Despite having a medical condition that drinking could worsen (like diabetes or heart disease)
- When planning to drive a car or engage in other activities that require alertness
- While recovering from AUD

Older clients who engage in heavy drinking are at risk for worsening of existing health problems (e.g., diabetes, high blood pressure, mood disorders, cancer).[50,51,52] In addition, certain life stressors[53,54] are linked to increased risk of alcohol misuse in older adults and could cause existing health problems to worsen. Such life stressors include:

- Financial strain.
- Job loss/retirement.
- Housing changes.
- Bereavement.
- Being a victim of theft.

As adults age, they metabolize alcohol differently and become more sensitive to its effects even when they drink less.[55] This increases risk of confusion, falls, and injury, and worsens existing health issues.

Establishing clients' history of use can help providers recognize possible substance use concerns in the future. Taking a history is also an opportunity to **offer prevention messages and encouragement** to individuals maintaining abstinence or very low use.

Older adults are more likely to take medications that interact badly with alcohol. Exhibit 1.3 lists some of these "alcohol-interactive" (AI) medications. In a review of 20 studies on reported use of alcohol and AI medication, more than half of individuals who used AI medication reported drinking alcohol.[56] Another study found that 77.8 percent of older adults who drank alcohol also took AI medications.[57]

EXHIBIT 1.3. Potential AI Medications[58]

- Medications to control heart or circulatory problems like arrhythmia or high blood pressure
- Diuretics, sometimes called water pills
- Seizure medications
- Antianxiety medications
- Muscle relaxers
- Pain medications, including opioids (e.g., oxycodone, hydrocodone) and nonsteroidal anti-inflammatory medications (e.g., ibuprofen)
- Medications to control diabetes
- Antidepressants

Older adults who drink and regularly take AI medications may experience severe negative reactions (e.g., falls, gastrointestinal bleeding, low blood pressure, drowsiness, heart problems, liver damage).[59] Drinking can also make these medications less effective in treating health conditions. Healthcare and behavioral health service providers should discuss the risks of combining alcohol and AI prescription medications with older clients, especially those with a history of alcohol use.

Prescription Medications

Most older adults take at least one prescription medication. Many take more than one. According to national estimates released in 2019,[60] 87.5 percent of older adults in the United States have at least one prescribed medication, and 39.8 percent take five or more prescription medications at the same time. **From 2015 to 2016, the percentage of adults taking a prescription medication was greater for the 65 and older age group (87.5 percent) than for any other adult age group.**

High prescription medication use puts older adults at greater risk than the general population for harmful side effects and drug–drug interactions, especially when they use over-the-counter (OTC) medications in addition to their prescriptions.[61] Many prescription medications may interact badly with alcohol (Exhibit 1.3) and other substances, compounding this risk. Additionally, older individuals are more likely to experience negative side effects from prescription medications because of aging-related changes that alter how the body processes such substances.[62]

# of older adults who **VISITED** the **ER** because of the prescription opioid **TRAMADOL** increased **481%** from 2005 to 2011.[63]

In addition, **older adults may make medication errors (e.g., take too much, forget to take medications) because they have difficult or complex medication regimens.** According to the Agency for Healthcare Research and Quality,[64] 50 percent of emergency department visits for adverse drug events in Medicare recipients are caused by four medication types: medications for diabetes (e.g., insulin), oral blood thinners (e.g., warfarin), anti-blood-clotting medications (e.g., aspirin, clopidogrel), and opioid pain relievers. Many older adults take numerous medications, thus increasing their chances of making errors.

Adults 65 and older are particularly vulnerable to misusing prescription medications. Prescription medication misuse involves taking a medication other than as prescribed, whether accidently or on purpose.

In 2019, the most commonly misused medications were pain relievers, with an estimated 1.7 percent (900,000) of adults ages 65 and older misusing them in the past year.[65] In 2019, pain reliever misuse was the fourth most common type of substance misuse among adults ages 65 and older in the United States.[66] Some older adults do use prescription medications to "get high," but many develop SUDs from misusing prescription medications to address sleep problems, chronic pain, or anxiety.[67,68,69]

The medications of most concern are psychoactive medications such as opioids and central nervous system (CNS) depressants. Opioids are medications that relieve pain. CNS depressants include antianxiety medications, tranquilizers, sedatives, and hypnotics. These medications affect brain function, which can result in changes in consciousness, behavior, mood, pain, perception, and thinking.

Nonmedical use of prescription medications by older adults will likely increase in the future. Most misused medications (e.g., pain relievers, stimulants, tranquillizers, sedatives) are obtained by prescription.[70]

Opioids

Older adults are at risk for nonmedical use of opioids, given the high prevalence of chronic pain in this population.[71] Chronic pain is among the most common reasons for taking opioid medications, but for some individuals, prescription opioids do not relieve pain.[72]

Older adults are also at risk for alcohol–opioid interactions. When taken with opioids, alcohol increases the risk of negative outcomes in older adults, including death.[73, 74,75]

Rates of death and suicide caused by prescription opioid misuse are increasing.[76] In 2016, the Food and Drug Administration (FDA) issued a warning about serious risks, including death, from combining opioids with benzodiazepines or other CNS depressants, and required boxed warnings for prescription opioids and benzodiazepines. FDA's action was not meant to suggest that providers withhold buprenorphine or methadone, which treat opioid use disorder (OUD), from patients also prescribed benzodiazepines, although FDA recommends careful medication management of these patients.[77] Exhibit 1.4 lists common opioids.

EXHIBIT 1.4. Common Forms of Opioids

- Hydromorphone
- Oxycodone
- Codeine
- Methadone
- Fentanyl
- Meperidine
- Hydrocodone
- Morphine

Older adults may receive prescriptions for opioids to help manage their pain. For some, this creates a desire to get more pain medication than prescribed, because of tolerance. Having staff trained in the administration of naloxone is important in case clients experience an overdose of opioid medication. Providers should also learn about and offer older adults nonopioid pain medications (e.g., acetaminophen, antidepressants) and nonpharmacological pain management options (e.g., cognitive–behavioral therapy, relaxation training, exercise).

Opioids can be appropriate in the short term and for specific uses, such as postsurgical discomfort or cancer-related pain. But for many older adults with chronic (e.g., greater than 3 to 6 months) noncancer pain, nonopioid options are appropriate, effective, and well tolerated.

Benzodiazepines

Benzodiazepines are frequently prescribed to older adults to treat anxiety and insomnia, despite having a high dependence potential. Benzodiazepines interact with alcohol, increasing the risk of negative outcomes. Recent research shows that, frequently, benzodiazepines are prescribed long term for older adults without a clear need for ongoing treatment.[78]

Benzodiazepines are linked with a number of risks in older adults, including falls,[79] problems with thinking,[80] motor vehicle accidents,[81] and overdose death.[82] Exhibit 1.5 lists common benzodiazepines.

EXHIBIT 1.5. Common Benzodiazepines

- Lorazepam
- Clonazepam
- Diazepam
- Alprazolam

Cannabis

Cannabis is illegal at the federal level, although an increasing number of states have legalized the recreational and medical use of cannabis. **In 2019, about 2.7 million adults ages 65 and older (5.1 percent) engaged in past-year cannabis use.[83]** The number of older adults using prescribed cannabis is unknown. From 2013 to 2014, 12-month prevalence of medical cannabis use among U.S. adults ages 50 and older was only 0.6 percent.[84]

Older adults using medical cannabis are at risk for misuse and diversion (including forced or coerced diversion by others).[85] Other adverse effects can include psychomotor slowing (e.g., gait instability leading to fall risk), cognitive problems (e.g., short-term memory impairment), and increased risk of heart attack, stroke, psychotic episodes, and suicide.[86] Studies have shown limited benefits of cannabis for medical purposes, with, for example, some evidence suggesting possible improvements in neuropathic pain and spasticity from multiple sclerosis in older adults;[87] also, certain components of cannabis have demonstrated some medical value when treating seizure disorders (Dravet's syndrome, Lennox-Gastaut syndrome), wasting illnesses, and lack of appetite.[88] Other medications can treat these conditions, but they do not always work for older adults and may have unpleasant side effects.

Little is known about interactions of cannabis with specific medications.[89] Cannabis affects the CNS. **The substance is associated with memory and thinking problems, difficulties with motor skills, depression, and anxiety, among other negative effects.[90,91,92,93]** Moreover, the increasing potency of cannabis in recent decades may make cannabis use riskier.[94]

Illicit Drugs

Older adults are much less likely to use illicit drugs than younger adults. However, the pattern of drug use in older adults is changing. According to national survey data, use of illicit drugs among adults ages 50 to 64 rose from 2.7 to 10.4 percent from 2002 to 2019.[95,96] Baby boomers are more likely than earlier generations to report use of heroin and psychoactive drugs like cocaine or methamphetamine.[97]

OTC Medications and Dietary Supplements

According to a 2016 analysis of national survey data,[98] about 38 percent of older adults take at least one OTC medication; more than 63 percent take a dietary supplement (e.g., herbal products, vitamins). Among those who take prescription medications, 71.7 percent also take OTC medication or dietary supplements.

OTC medications, including OTC pain medications like acetaminophen and ibuprofen, and dietary supplements can interact harmfully with prescription medications, illicit substances, and alcohol. Older adults may lack awareness of side effects and possible negative interactions, because information that comes with OTC medications often does not include warnings specifically for older adults.

Providers should routinely discuss OTC medication use with older clients and advise them of possibly harmful interactions with prescribed medications, alcohol, and other substances.[99]

Older adults (and their families and caregivers) should inform their healthcare providers of any OTC medications and dietary supplements, including herbal products, they take. Asking for guidance on safety is crucial when taking multiple OTC medications or using them in combination with alcohol or a prescribed medication.

Risk and Protective Factors for Substance Misuse in Aging

The unique physical, emotional, and cognitive challenges older adults face tend to mask SUD symptoms, making it harder for providers to identify and address SUDs.

The aging process often includes major life changes and transitions. Some older adults turn to drugs or alcohol to cope.[100] Older adults also face many aging-related physical and mental health issues that may increase their risk of substance misuse and make detection and treatment difficult.

The aging process can cause changes in and problems with thinking**. Symptoms of cognitive decline and symptoms of substance misuse may be similar.** This makes it harder for family members, caregivers, and healthcare and behavioral health service providers to recognize when older adults misuse substances.

Many older adults who misuse substances have a history of co-occurring mental disorders, which suggests that mental illness is a risk factor for this population. Older adults with co-occurring mental and substance use disorders are at risk for negative outcomes like greater need for behavioral health services and higher rates of homelessness and suicidal thoughts.[101,102,103]

Exhibit 1.6 lists risk factors for substance misuse in older adults.

EXHIBIT 1.6. Substance Misuse Risk Factors in Older Adults[104,105]

- Retirement (when not voluntary)
- Loss of spouse, partner, or family member
- Environment (e.g., relocation to assisted living)
- Physical health (e.g., pain, high blood pressure, sleep and mobility issues)
- Previous traumatic events
- Mental disorders (e.g., disorders related to depression and anxiety)
- Cognitive decline (e.g., Alzheimer's disease)
- Social changes (e.g., less active, socially disconnected from family and friends)
- Economic stressors (rising medication and healthcare costs, living on reduced income)
- Lifetime or family history of SUDs
- High availability of substances
- Social isolation

Protective factors help prevent or reduce substance misuse in older adults.[106,107,108] Exhibit 1.7 lists protective factors against substance misuse in older adults.

EXHIBIT 1.7. Substance Misuse Protective Factors in Older Adults

Protective factors are factors that can reduce substance misuse or make it less likely to occur. They include a person's strengths, skills, and abilities as well as environmental factors. Protective factors include:

- Resiliency.
- Marriage or committed relationship.
- Supportive family relationships.
- Retirement (when voluntary).
- Ability to live independently.
- Access to basic resources such as safe housing.
- Positive self-image.
- Well-managed medical care and proper use of medications.
- Sense of identity and purpose.
- Supportive networks and social bonds.

EXHIBIT 1.8. Barriers to Seeking Treatment

- **Negative attitudes.** Some families, caregivers, and service providers don't feel comfortable addressing substance misuse because of their negative views about SUDs. They may also be afraid of "making waves" or feel that asking about the issue would intrude on the older adult's life or independence.
- **Denial of the problem.** Family and friends often either ignore or accept older adults' substance misuse, especially if the problem is long standing.
- **Accepting attitudes.** Some adults live in settings where family and peers have accepting attitudes toward alcohol and drugs. Even caregivers and medical professionals may view substance use as okay for older adults (e.g., viewing substances as older adults' "one last pleasure").[109,110]
- **Lack of knowledge.** Family and friends may not realize that older adults undergo physiological changes that make the effects of alcohol or drugs more dangerous.
- **Misinformation about treatment.** Some people hold the false belief that older adults cannot be treated for SUDs. However, evidence shows that addiction treatment for older adults has positive outcomes, can reduce or stop substance use, and improves health and quality of life.[111,112,113,114,115,116]

See the Chapter 1 Appendix for a more detailed list of barriers to seeking treatment.

Barriers to Seeking Treatment

Exhibit 1.8 lists some of the barriers that prevent older adults from getting the SUD treatment they need. Understanding these barriers is a key step in reducing substance misuse in the older adult population. Such misuse limits one's ability to function and to achieve the best possible quality of life, regardless of age.

The following two sections will be of greater interest to healthcare providers. These sections give overviews of basic information on screening, diagnosis, and treatment as they apply to older clients from the provider's point of view.

Screening and Diagnosis

Screening, brief intervention, and referral to treatment (SBIRT) is the overall model for and approach to screening and intervening with individuals who misuse, or are at risk for misusing, substances. Older adults with SUDs may receive screening, diagnosis, and treatment for SUDs in many different settings and from a variety of professionals. Few older adults seek help in specialized addiction treatment settings.

All healthcare, behavioral health, and aging service providers must know the signs/symptoms of SUDs and substance misuse in older adults and have protocols for screening, treatment, or referral.[117,118]

See Chapters 3, 4, and 5 of this TIP for more information about screening, assessment, and SBIRT.

Screening

Universal screening is key in SBIRT. Providers should screen all older clients for substance use (type of substance, frequency, quantity), misuse (including of prescriptions), consequences, and drug–drug interactions.

UNIVERSAL SCREENING[119]

Healthcare and social service providers should give all older clients a brief prescreen. Most will screen negative, but prescreening helps identify substance misuse that may otherwise be overlooked.

Settings in which older adults may receive screening for substance-related problems include:

- Healthcare clinics.
- Hospitals.
- SUD treatment programs.
- Home health care.
- Nursing homes.
- Social service agencies.

- Senior centers.
- Assisted living facilities.
- Faith-based organizations.

The TIP consensus panel recommends yearly screening for all adults ages 60 and older and when major life changes occur (e.g., retirement, loss of partner/spouse, changes in health). For more accurate histories, ask questions about substance use in the recent past while asking about other health behaviors (e.g., exercise, smoking, diet). Asking straightforward questions in a nonjudgmental manner is the best approach. Providers should also ask about medical marijuana prescriptions or use.

Screening helps fully determine which substances (including alcohol) and medications a client takes and what, if any, interactions these substances, prescription medications, OTC medications, and dietary supplements may have with each other. Many providers fail to ask about OTC medications. However, some OTC medications (particularly anticholinergic agents, like diphenhydramine [Benadryl], doxylamine [Unisom], and acetaminophen/diphenhydramine [e.g., Tylenol PM]) can be problematic in combination with alcohol or prescription medications as well as illicit drugs.

Screening for older adults can be verbal (e.g., by interview), with paper-and-pencil forms, or with computerized forms. All three methods are reliable and valid.[120] Any positive responses should lead to further questions constituting full assessment (or referral for full assessment by a qualified provider).

Chapter 3 of this TIP offers further information about substance misuse screening measures and how to follow up with clients who screen positive as well as those who screen negative.

Diagnostic Issues in Working With Older Adults

Some DSM-5 SUD criteria may not apply to older adults with substance use problems, even though DSM-5 criteria generally determine SUD diagnoses. For example, in retired older individuals with fewer familial and work obligations, substance use may not cause failure to fulfill major obligations at work, school, or home. Even so, it may negatively affect health, daily activities, or functioning.[121]

Older adults have unique risk factors that increase their vulnerability to substance misuse, but signs and symptoms of SUDs often resemble those of other health issues, making detection difficult. Bodily changes (e.g., slower metabolism, reduced muscle mass, altered body fat percentages and organ functions) make older adults more sensitive to the effects of alcohol and drugs. Because of such changes, smaller amounts of substances may cause more harmful effects. These changes can occur gradually, which may make them harder to notice.

Older individuals who misuse substances may require treatment even if they do not meet DSM-5 criteria for an SUD. Quantity-frequency measures may be less effective than assessment of impact on overall well-being and quality of life in identifying substance misuse for this population. Healthcare and behavioral health service providers must determine these effects before focusing on interventions and treatments.

Treatment

Addiction treatment programs have begun to see an increase in admissions among older adults because of the population increase and the higher prevalence of lifetime substance use among baby boomers.[122,123] Although alcohol use remains the primary reason for admission, the years 2000 to 2012 saw a decrease in alcohol-related admissions and steep increases in admissions for prescription opioids as well as illicit drugs such as cocaine, crack, and heroin.[124]

Early- and Late-Onset Substance Misuse

SUD diagnosis and treatment planning depend, in part, on when substance use began in older adults. "Early onset" substance use is present in those with a history of at-risk or harmful substance use that began before age 50.[125] "Late-onset" substance use is present in those who began to misuse substances only later in life. Exhibit 1.9 shows early- versus late-onset aspects of alcohol misuse as an example.

EXHIBIT 1.9. Characteristics of Early-Onset Versus Late-Onset Alcohol Misuse[126]

- Early onset:
  - Risky or harmful drinking patterns prior to age 50
  - Long-term denial, which complicates treatment
  - Multiple medical comorbidities, limited social support, poor emotional skills, and cognitive impairment
  - More common, making up two-thirds of older adults[127]
- Late onset:
  - Began misusing alcohol later in life (possibly following alcohol problems at various periods earlier in life)
  - May have begun misusing alcohol because of age-related stressors (e.g., retirement, loss of income or partner)
  - Preceded by stable periods of abstinence or low-level drinking over a long period of time
  - May appear "too healthy" to raise concerns

People with late-onset misuse may seem "too healthy" to raise concern. Providers should ask older clients about lifetime substance use patterns. Problems can arise with stressors in older adulthood.[128,129]

Medication Interventions

AUD

Acamprosate, disulfiram, and naltrexone are approved to treat AUD. They can improve outcomes[130] but are not usually used for long-term treatment of older adults with AUD.

Acamprosate

Acamprosate is approved by FDA to treat AUD.[131] Clinical evidence suggests that acamprosate can help people with alcohol dependence maintain abstinence by reducing cravings and the pleasurable effects associated with alcohol.[132,133] It may also lessen symptoms of prolonged abstinence such as anxiety and insomnia.[134] To date, **research on acamprosate use in older adults is not readily available.** Because acamprosate is removed from the body through the kidneys and older adults are at elevated risk of diminished kidney function, this population should have baseline and frequent renal function tests as part of acamprosate treatment.[135]

Disulfiram

Disulfiram is approved by FDA to treat AUD.[136] Disulfiram triggers an acute physical reaction to alcohol, including flushing, fast heartbeat, nausea, chest pain, dizziness, and changes in blood pressure.[137,138] These reactions are supposed to motivate a person to avoid drinking alcohol.

Because the effects of taking this medication in combination with alcohol can be harmful to older people, it is generally not recommended for use in this population and, if used, is done so only with great caution.[139,140]

Also, for disulfiram to be useful, clients must stick to strict medication protocols.[141] Doing so may be hard for older adults who have cognitive impairment or live alone and have no one to support them in taking medication as prescribed. A meta-analysis suggests that when compliance with disulfiram is not monitored, its efficacy is no different from that of control conditions.[142] **Monitoring for adherence is essential for disulfiram to be effective.** People taking disulfiram may also need to be observed, as some may stop taking it on a day during which they want to drink.

Naltrexone

Naltrexone is approved by FDA to treat AUD.[143] It reduces craving for alcohol and decreases the rate of relapse to heavy drinking. Some research suggests that naltrexone is tolerable in adults ages 50 and older, but widespread data on its tolerability in older individuals are lacking.[144]

Naltrexone is an opioid blocker and cannot be used in clients who require prescription opioids for pain relief. Giving naltrexone to a client who takes opioid medication for pain may cause significant opioid withdrawal symptoms.

OUD

Medication treatment for OUD can reduce risk of relapse.[145,146] **Three medications can treat older adults with OUD: naltrexone, buprenorphine, and methadone. The opioid overdose medication naloxone is also safe and effective in older adults.** Learn more about medication for OUD in the Substance Abuse and Mental Health Services Administration's (SAMHSA) TIP 63, *Medications for Opioid Use Disorder* (https://store.samhsa.gov/product/TIP-63-Medications-for-Opioid-Use-Disorder-Full-Document/PEP20-02-01-006).

Naltrexone

Naltrexone can prevent relapse after medically supervised opioid withdrawal.[147] It is not a pain medication. It is a medication that reduces cravings for and effects of opioids and alcohol. Research on its use in older adults with OUD is not readily available, but some studies have shown it to be **safe and acceptable in older adults** with AUD.[148,149]

Buprenorphine

Buprenorphine can treat opioid withdrawal or provide long-term medication maintenance for OUD. It is so effective that the World Health Organization (WHO) lists it as "an essential medication."[150,151] **Compared with methadone, less is known about use of buprenorphine in older adults with OUD.** It may be preferable to methadone, because it is less likely to cause withdrawal symptoms, erectile dysfunction, and prolonged QT interval (see "Methadone" section). It may be safer than methadone for older adults with cardiovascular/respiratory disorders.[152] A study of short-term use of low-dose buprenorphine for older adults with depression found the medication to be safe and well tolerated.[153] However, more studies are needed to fully understand the benefits and side effects of buprenorphine in older adults with OUD.

Certain buprenorphine formulations are FDA approved to treat chronic pain. One such formulation is the buprenorphine transdermal system,[154] which appears safe for pain treatment among older adults.[155]

Methadone

Methadone is used to prevent opioid withdrawal symptoms and reduce cravings for people with OUD.[156] As with buprenorphine, it is considered so effective that WHO lists it as "an essential medication."[157,158] Methadone is available through federally certified and accredited opioid treatment programs. It can be effective on its own, but research shows that it is often **more effective in treating OUD when used with behavioral, social, and other medical services.**[159] Methadone can also be prescribed to treat chronic pain in older adults.[160,161]

Older adults taking methadone may experience certain side effects, some of which can be serious.[162] Methadone is associated with higher risk of prolonged QT interval, which can cause a potentially deadly cardiac arrhythmia.[163] This risk is even greater when methadone is taken at higher doses, with other QT-prolonging medication, or by someone with congestive heart failure. Many medications negatively interact with methadone.[164] This is an important consideration in older adults, who are likely to take multiple medications. As with other opioids, methadone can increase the risk of falls in older adults.[165]

RESOURCE ALERT: METHADONE SAFETY

See *Methadone Safety: A Clinical Practice Guideline From the American Pain Society and College on Problems of Drug Dependence, in Collaboration With the Heart Rhythm Society* (www.jpain.org/article/S1526-5900(14)00522-7/fulltext).

This guideline provides recommendations on the safe use of methadone and addresses the potential risks related to overdose and cardiac arrhythmias.

Naloxone

Naloxone does not treat OUD or pain by itself, but it can reverse potentially fatal opioid overdoses. It is so effective that WHO lists it as "an essential medication."[166] Older adults are at increased risk of opioid overdose. Bodily changes that occur normally in aging cause older adults to experience a higher concentration of opioid metabolites than younger adults when the same dose is consumed.[167] **Low-dose naloxone is safe and effective in older adults** in case of opioid overdose.

Formal and Informal SUD Treatment Approaches

People can change their substance use at any age. Once substance misuse becomes apparent, hope for recovery should always follow. A wide range of professionals and providers across a variety of settings share the responsibility to help older clients achieve recovery.

Some studies suggest that older adults who enter specialized SUD treatment have better outcomes than younger adults.[168,169,170,171] However, many traditional SUD treatment programs do not serve many older adults (compared with the number of younger people they serve). In 2019, only about 23 percent of SUD treatment facilities had older adult-specific programming.[172] Thus, few studies with significant older populations have examined effectiveness of residential programming in this age group.

Older adults do best in SUD treatment programs that offer age-appropriate care with providers who are knowledgeable about aging issues.[173] In the community-based Geriatric Addictions Program, for older adults with SUDs and co-occurring mental disorders, a multidimensional approach connected more older adults to outpatient and inpatient treatment than did traditional assessment and referral. The multidimensional approach included geriatric care management assessment, motivational counseling, in-home counseling, and referral to aging services and addiction treatment.[174]

Many pathways lead to recovery, and many treatment options work for older adults (Exhibit 1.10).

EXHIBIT 1.10. Range of Intervention and Treatment Strategies for Older Adults

- Minimal advice
- Structured brief intervention protocols (e.g., SBIRT)
- Structured brief treatments
- Formal specialized treatments
- Relapse prevention programs

Few older adults who screen positive for substance misuse need specialized addiction treatment. Many can change their misuse through less intensive approaches,[175,176] such as:

- Professional and personal advice and discussions.
- Education about alcohol misuse, drug use, and prescription medication misuse.
- Brief structured interventions and treatments (both individual and group).

Each older adult has an individual history and unique needs. Each older client's intervention or treatment path will also be unique. The path to improving outcomes is determined, in part, by the severity of the problem, the individual's willingness to get help with reducing or stopping substance misuse, the types of programs available, and the cost of care.

Summary

Evidence-based screening techniques, brief interventions or treatments, and specialized care options give older adults the best chances of improving their physical and emotional health. Identification and treatment of SUDs can be challenging, but is possible with the right knowledge and tools.

This TIP will guide SUD treatment providers, supervisors, and administrators; mental health service providers; state and community behavioral health service agencies; healthcare providers; caregivers; families; and older adults in understanding and accessing evidence-based screening, intervention, and treatment options to address substance misuse in a number of settings.

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Chapter 1 Appendix

Older Adults and Barriers to SUD Treatment and Mental Health Services

Older adults face barriers at many levels in accessing SUD treatment and mental health services. Barriers can be personal, interpersonal, structural, or a combination. Recognizing, understanding, and working to remove barriers will help all older clients receive the best possible care for substance misuse.

The following table shows the many types of barriers older adults potentially face in addressing substance misuse. The table includes citations of supporting research; access these references to learn more about each barrier and how it affects older adults.

Barriers Older Adults Face in Addressing Substance Misuse

BARRIER	DEFINITION, DESCRIPTION, OR EXAMPLE OF BARRIER	SAMPLES OF RESEARCH
Common myths and negative beliefs	Myths and negative beliefs include "Drug addiction is only a 'young person's problem'" or "Once an alcoholic, always an alcoholic." Providers or family members with these beliefs might not offer to help an older person who misuses substances. Similarly, an older person who fears stigma that comes from hearing other people express these negative beliefs might not ask for help.	Choi et al. (2014)[177] Blais et al. (2015)[178] Crome (2013)[179]
Co-occurring physical and mental health conditions	Symptoms of substance misuse can seem similar to symptoms of other conditions common in older adults, including depression, anxiety, posttraumatic stress disorder, chronic pain, and sleep problems. Providers, family members, and clients themselves can easily mistake the symptoms of substance misuse for one or more of these conditions. Little research clarifies barriers for older adults with co-occurring mental and substance use disorders. But in adults in general, these co-occurring disorders (CODs) are associated with several barriers to treatment access: stigma, negative beliefs about addiction and mental health services, lack of specialized services for people with CODs, and providers' failure to recognize both conditions in a client with CODs.	Royal College of Psychiatrists (2015)[180] Crome (2013)[181] Center for Behavioral Health Statistics and Quality (2020)[182] Priester et al. (2016)[183]

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BARRIER	DEFINITION, DESCRIPTION, OR EXAMPLE OF BARRIER	SAMPLES OF RESEARCH
Lack of awareness on the part of older clients	Older clients may not realize how much they are drinking or that their substance misuse is a problem. For instance, older people are affected by alcohol differently than when they were younger. This is because of changes in the body that are a normal part of aging, like losing lean mass. For example, a woman in her 70s might think she can safely drink the same amount of alcohol that she drank in her 30s. This is not necessarily so. Some older adults think the amount of alcohol they drink is not risky although it exceeds recommendations for low-risk drinking. Sometimes a client's lack of awareness can result from cognitive impairment, making it hard for the client to self-monitor alcohol intake.	Sacco & Kuerbis (2013)[184] Borok et al. (2013)[185] Kuerbis et al. (2014)[186]
Family members' lack of awareness of older adults' misuse	Adult children may not know how much their parent is drinking or that his or her substance misuse is harmful. Even when aware of an older adult's substance misuse, family members may not seek help as quickly as needed. They may have thoughts such as "Alcohol is my father's last pleasure in life. I'd hate to take that away from him."	Royal College of Psychiatrists (2015)[187] Briggs et al. (2011)[188]
Ageism	"Ageism" refers to negative beliefs or attitudes about older people that lead to stereotyping or discrimination. An example of ageism is failing to screen a client in her 80s for SUDs because "people her age don't benefit from treatment."	Royal College of Psychiatrists (2015)[189] Chrisler et al. (2016)[190]
Views of SUDs as a moral failure or weakness	An older client who believes that having an SUD is a sign of being "weak" or a "bad person" might feel too ashamed to ask for help.	Royal College of Psychiatrists (2015)[191]
Financial problems, insurance issues	Examples of this barrier include low income or no income, as well as having no insurance or insurance that does not cover SUD treatment and mental health services.	Choi et al. (2014)[192] Osborn et al. (2017)[193]
Limited mobility, transportation, or both	Examples of these barriers are having difficulty walking or not having access to mobility assistance devices (like a walker or wheelchair). This barrier also includes being unable to travel to appointments (e.g., not having a car, not having access to public transportation).	Choi et al. (2014)[194] Hadley Strout et al. (2016)[195]

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BARRIER	DEFINITION, DESCRIPTION, OR EXAMPLE OF BARRIER	SAMPLES OF RESEARCH
Living situations and social settings that "normalize" substance misuse	A home setting or social network that supports older adults' misuse of substances can hinder diagnosis and treatment. For instance, in some assisted living facilities, residents frequently use alcohol. This could make it harder for staff to identify an older client who misuses alcohol because drinking is seen as "normal." In some nursing homes, staff do not regularly ask about alcohol use at intake and may fail to recognize when residents are misusing alcohol. Many long-term care facilities have no policies on illicit drug use. This suggests that staff members may not be fully prepared to recognize and respond to residents' drug use. Older adults with spouses/friends who misuse alcohol or support drinking may be at more risk for alcohol misuse because they are surrounded by people who make their alcohol misuse seem "normal."	Castle et al. (2012)[196] Klein & Jess (2002)[197] White et al. (2015)[198] Moos et al. (2011)[199]
Lack of social support, including social isolation or low social connectedness	Older adults with few or weak social relationships (like being single, widowed, or divorced) may be less likely to visit healthcare providers compared with older adults with stronger social ties (like being married or living with someone else). Older adults who are socially connected and feel positive about their social network appear to have better access to healthcare services and better health and well-being than older people who are not socially well connected.	Bremer et al. (2017)[200] Graham et al. (2014)[201]
Limited numbers of providers with knowledge of and commitment to working with older adults	Too few healthcare providers and behavioral health service providers are trained to work with older adults who misuse substances. Without this training, providers are less likely to screen, assess, diagnose, and treat older clients who misuse substances.	Institute of Medicine (2012)[202] Bartels et al. (2014)[203]
No coordinated services; limited access to behavioral health or social services across care settings or geographic regions	Older adults who misuse substances, have other problems related to behavioral health, or both need coordinated, person-centered care. Coordinated care helps address all of clients' physical, mental, and social service needs. Many older clients who misuse substances do not receive coordinated care. Healthcare providers (including physicians, nurses, and physician assistants) and behavioral health service providers should be appropriately trained and working together closely when providing SUD treatment or mental health services.	Institute of Medicine (2012)[204] Gage & Melillo (2011)[205]

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BARRIER	DEFINITION, DESCRIPTION, OR EXAMPLE OF BARRIER	SAMPLES OF RESEARCH
Lack of case management or care management	Case managers (or "care managers") coordinate healthcare and behavioral health services across providers. When care is not coordinated, clients might not get access to the full range of treatments they need. The workforce needs to identify and include in coordinated services case managers or care managers who are specially trained in older adults' unique substance misuse and mental health issues. Providers who do not understand the particular ways that older adults experience substance misuse may be less likely to screen, assess, diagnose, and treat older clients for SUDs, as needed.	Institute of Medicine (2012)[206]
Ambivalence about changing a health behavior	Like young and middle-aged adults, older adults may feel ambivalent about changing a long-standing health behavior. This can be a barrier to entering treatment or following a provider's recommendations.	National Research Council (2006)[207]
Normal life changes	Older adults commonly experience life changes that increase their risk of misusing substances. Such changes include moving into assisted living or other long-term care facility, retiring from work, and losing a family member (such as a spouse or adult child). It might be easy to "normalize" or make light of an older person's substance misuse in one of these situations. ("He doesn't really have a drinking problem. He's just drinking because he lost his wife. Who can blame him?") But substance misuse in these situations is just as serious and potentially harmful as in any other situation.	Kuerbis et al. (2014)[208]
Loss, especially death of children, spouse, siblings, or close friends; also, loss of employment (e.g., forced retirement)	The death of a family member or friend can be extremely distressing. In some older adults, grief can increase the risk of substance misuse, especially alcohol misuse and tobacco use. Grieving older adults may misuse substances as a way of coping with their loss. If this is their main method of coping, it can be a barrier to entering treatment, as they likely will not want to quit. Some older people consider retirement a form of loss, especially when the retirement is unwanted. Many people define themselves by their work. For them, leaving their job represents a loss of their identity and can lead to negative self-esteem. People may misuse substances as a way of coping, which could be a barrier to entering treatment.	Stahl & Schulz (2014)[209] Kelly et al. (2018)[210]

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BARRIER	DEFINITION, DESCRIPTION, OR EXAMPLE OF BARRIER	SAMPLES OF RESEARCH
Lack of health literacy	"Health literacy" is a person's ability to access, understand, and communicate about health-related information. Older people with low health literacy may have trouble talking about substance misuse with their providers. They may also not understand, for example, what amount of alcohol is considered low risk versus harmful. In these instances, these individuals may not seek treatment.	Levy & Janke (2016)[211] Geboers et al. (2016)[212] Findley (2015)[213]
Cultural norms	Cultural norms can influence a person's help-seeking behavior. For example, an older person whose culture discourages talking about mental illness or substance misuse may not seek help. In some cultures, it is more acceptable to talk about physical symptoms, such as aches and pains or sleep problems, than it is to talk about symptoms of addiction or mental illness, like feeling depressed or wanting to hurt oneself. This can make it hard for a provider to know when a client from this kind of cultural background has a problem related to substance misuse or mental illness.	Royal College of Psychiatrists (2015)[214] Barrio et al. (2008)[215] Jimenez et al. (2013)[216]
Racial and cultural differences among older clients	Racial and cultural factors can affect how a person thinks and speaks about his or her behavioral health, seeks help for addiction or mental illness, and receives treatment. For instance, an older individual who does not speak English fluently may feel uncomfortable asking for help from a provider who speaks only English.	De Guzman et al. (2015)[217] Barrio et al. (2008)[218] Sorkin et al. (2016)[219]
Gender and sexual identity	Like race and culture, older adults' gender and sexual identity can affect whether they seek and receive help for substance misuse or mental illness. For example, older lesbian, gay, bisexual, transgender, and questioning adults may be slow to seek treatment out of fear that providers will refuse to care for them or because they are uncomfortable with physical exams. Older women are especially vulnerable to some barriers, like stigma, low income, or providers not recognizing their substance misuse.	Auldridge et al. (2012)[220] Koenig & Crisp (2008)[221] Chrisler et al. (2016)[222]

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Chapter 2—Principles of Care for Older Adults

KEY MESSAGES

- Incorporating age-sensitive and age-specific treatment practices into your program is important for engaging older clients and improving their retention in treatment.
- The older adult population is culturally, racially, and ethnically diverse. Recognize and address diversity and health disparity issues related to aging.
- Collaboration among service providers across settings is essential when working with older adults who misuse substances, particularly for those with co-occurring medical conditions and mental disorders.
- Hiring, training, and retaining staff who demonstrate high motivation and commitment to serving older adults are vital to successfully implementing substance use disorder (SUD) treatment programs and services for this population.

Chapter 2 of this Treatment Improvement Protocol (TIP) will most benefit healthcare, mental health, addiction treatment, and social service providers who work with older adults. It addresses principles of care for older clients who present across settings with substance misuse. By tailoring traditional treatment methods and adopting age-specific, age-sensitive, science-informed interventions, providers can better fulfill the needs of a growing population of older adults who misuse substances. Older adults receive services in many settings besides SUD treatment programs: mental health service programs, primary care practices, emergency departments, senior centers, adult day programs, faith-based organizations, and assisted living and residential care facilities. Across settings, early identification, universal screening, and education for substance misuse can facilitate brief intervention and referral to treatment.

Organization of Chapter 2 of This TIP

Chapter 2 addresses the general principles of care—across service settings—for older adults with a history of substance misuse. The following are essential principles of care:

- Understand the developmental issues of aging.
- Acknowledge and address the diversity among older adults.
- Recognize the difference between early- and late-onset SUDs among older adults.
- Emphasize client education, early identification, screening, and brief treatment.
- Engage in health risk reduction practices.
- Provide person-centered care.
- Build alliances with older clients; use age-sensitive strategies to engage/retain them in treatment.
- Help older clients use social networks and community-based services.
- Encourage family and caregiver involvement.
- Coordinate care and develop service linkages.
- Make programmatic changes to effectively serve older adults with SUDs.
- Invest in age-sensitive workforce development.

Chapter 2 concludes with a list of targeted resources to support the delivery of older adult–focused services to address substance misuse. A more detailed resource guide is available in Chapter 9 of this TIP.

Exhibit 2.1 provides definitions for key terms that appear in Chapter 2.

EXHIBIT 2.1. Key Terms

- **Addiction*:** The most severe form of SUD, associated with compulsive or uncontrolled use of one or more substances. Addiction is a chronic brain disease that has the potential for both recurrence (relapse) and recovery.
- **Age-sensitive:** Adaptations to existing treatment approaches that accommodate older adults' unique needs (e.g., a large-print handout on the signs of substance misuse).
- **Age-specific:** Treatment approaches and practices specifically developed for older adults (e.g., an older adult specialty group in a mixed-age SUD treatment program).
- **Alcohol misuse:** The use of alcohol in any harmful way, including heavy drinking, binge drinking, and alcohol use disorder (AUD).
- **At-risk/high-risk drinking:** Drinking alcohol in excessive amounts. This definition encompasses both binge drinking and heavy drinking. Additionally, any alcohol consumption is considered risky when carried out by individuals with certain medical conditions that are worsened by alcohol, those taking medicine that can interact harmfully with alcohol, those driving a car or engaged in other activities that require alertness, or people recovering from AUD. [223,224] Note that for purposes of this TIP, at-risk drinking and high-risk drinking are synonymous and either term is acceptable to describe an older adult's drinking patterns.
- **Binge drinking:** A drinking pattern that leads to blood alcohol concentration levels of 0.08 grams per deciliter or greater. This usually takes place after four or more drinks for women and five or more drinks for men.[225,226] However, older adults are more sensitive to the effects of alcohol, and treatment providers may need to lower these numbers when screening for alcohol misuse.[227] Additionally, other factors such as weight, decrease in enzyme activity, and body composition (e.g., amount of muscle tissue present in the body) can also affect alcohol absorption rates.
- **Caregivers:** Informal caregivers provide unpaid care. They assist others with activities of daily living (ADLs), including health and medical tasks. Informal caregivers may be spouses, partners, family members, friends, neighbors, or others who have a significant personal relationship with the person who needs care. Formal caregivers are paid providers who offer care in one's home or in a facility.[228] Most older adults do not need caregivers and are as able to address their own needs as younger adults, whether or not substance misuse is a factor in their lives.
- **Drug–drug interaction:** The interaction of one substance (e.g., alcohol, medication, an illicit drug) with another substance. Drug–drug interactions may change the effectiveness of medications, introduce or alter the intensity of side effects, and increase a substance's toxicity or the concentration of that substance in a person's blood. Potentially serious interactions can also occur with certain foods, beverages, and dietary supplements.[229]
- **Drug use:** The full range of severity of illicit drug use, from a single instance of use to meeting criteria for a drug use disorder.
- **Heavy drinking:** Consuming five or more drinks for men and four or more drinks for women in one period on each of 5 or more days in the past 30 days.[230]
- **Moderate drinking:** According to the 2015–2020 *Dietary Guidelines for Americans*, moderate drinking is defined as up to two drinks per day for men and up to one drink per day for women.[231,232] However, the Centers for Disease Control and Prevention (CDC) notes that these numbers apply to any given day and are not meant as an average over several days.[233] Additionally, individuals who don't metabolize alcohol well may need to consume even lower quantities. Some people, particularly those with certain alcohol-related illnesses or engaging in tasks requiring concentration, should not consume alcohol at all. The *Dietary Guidelines* stipulate that those who don't drink should not begin drinking for any reason.[234]

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- **Mutual-help groups:** Groups of people who work together on obtaining and maintaining recovery. Unlike peer support (e.g., the use of recovery coaches or peer recovery support specialists), mutual-help groups consist entirely of people who volunteer their time and typically have no official connection to treatment programs. Most are self-supporting. Although 12-Step groups such as Alcoholics Anonymous and Narcotics Anonymous are the most widespread and well researched type of mutual-help groups, other groups may be available in some areas. They range from groups affiliated with a religion or church (e.g., Celebrate Recovery, Millati Islami) to purely secular groups (e.g., SMART [Self-Management and Recovery Training] Recovery, Women for Sobriety).
- **Peer support:** The use of peer recovery support specialists (e.g., someone in recovery who has lived experience in addiction plus skills learned in formal training) to provide nonclinical (i.e., not requiring training in diagnosis or treatment) recovery support services to individuals in recovery from addiction and to their families.
- **Recovery*:** A process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential. Even individuals with severe and chronic SUDs can, with help, overcome them and regain health and social function. This is called remission. When those positive changes and values become part of a voluntarily adopted lifestyle, that is called being in recovery. Although abstinence from all substance misuse is a cardinal feature of a recovery lifestyle, it is not the only healthy, prosocial feature.
- **Relapse*:** A return to substance use after a significant period of abstinence.
- **Remission:** A medical term meaning a disappearance of signs and symptoms of the disease or disorder. The fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) defines remission as present in people who previously met SUD criteria but no longer meet any SUD criteria (with the possible exception of craving).[235] Remission is an essential element of recovery.
- **Substance misuse*:** The use of any substance in a manner, situation, amount, or frequency that can cause harm to users or to those around them. For some substances or individuals, any use would constitute misuse (e.g., underage drinking, injection drug use).
- **Substance use disorder*:** A medical illness caused by repeated misuse of a substance or substances. According to DSM-5,[236] SUDs are characterized by clinically significant impairments in health and social function, and by impaired control over substance use. They are diagnosed through assessing cognitive, behavioral, and psychological symptoms. SUDs range from mild to severe and from temporary to chronic. They typically develop gradually over time with repeated misuse, leading to changes in brain circuits governing incentive salience (the ability of substance-associated cues to trigger substance seeking), reward, stress, and executive functions like decision making and self-control. Multiple factors influence whether and how rapidly a person will develop an SUD. These factors include the substance itself; the genetic vulnerability of the user; and the amount, frequency, and duration of the misuse. Note: A severe SUD is commonly called an addiction. A mild SUD is generally equivalent to what previous editions of DSM called substance abuse; a moderate or severe SUD is generally equivalent to what was formerly called substance dependence.

* The definitions of all terms marked with an asterisk correspond closely to those given in *Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health*. This resource provides a great deal of useful information about substance misuse and its impact on U.S. public health. The report is available online (https://addiction.surgeongeneral.gov/sites/default/files/surgeon-generals-report.pdf).

General Principles of Care

Older adults tend to do as well as or better than younger adults in mixed-age SUD treatment.[237,238] Moreover, growing evidence links age-specific treatment to better treatment adherence and long-term outcomes for many older adults.[239] Even so, only about 23 percent of SUD treatment programs in the United States offer a program or group specifically tailored to older adults.[240]

Few SUD treatment approaches are designed specifically for older adults. Therefore, this TIP provides general principles of care that can inform a flexible approach for age-sensitive, age-specific treatment of substance misuse among older adults. The principles are a framework to guide your work with older adults across settings to address issues related to their misuse of substances.

Understand the Developmental Issues of Aging

Older adults are not a homogenous group. As with any group, older adults may hold a diverse range of opinions and attitudes toward alcohol and drug use. For example, within the older adult population, **people in various age ranges differ from one another in significant ways that may influence which approaches will most successfully address substance misuse.**

Earlier cohorts of older adults (e.g., adults born before or during World War II) are more likely to have moralistic attitudes about drinking and drug use—attitudes that, for some, were shaped by Prohibition and the Temperance Movement.[241] They may feel deeply ashamed about alcohol misuse or drug use. If they attribute their substance misuse to a moral failing, they may be less likely to seek SUD treatment.[242] These cohorts are likelier to **benefit from screening and brief intervention with a healthcare provider when questions about drinking and drug use are part of an overall approach to health assessments.**

Baby boomers (i.e., adults born between 1946 and 1964) grew up in a time when substance use was more culturally acceptable. They **may have more permissive attitudes toward drinking and drug use. They are also more likely to be willing to seek and agree to specialized addiction treatment.**[243]

Older adults have unique developmental challenges that younger adults may not have. These include possibly losing a spouse or partner, as well as experiencing:

- Increasing numbers of deaths of friends in the same age cohort.
- Role changes in families and work-related activities.
- Reduced opportunities for increasing or maintaining income levels.
- Normal age-related cognitive and physical decline leading to loss of functioning and reduced capacity to carry out ADLs.[244]

Providing age-sensitive, age-specific treatment approaches helps older adults feel more comfortable discussing personal issues and age-related changes than they would feel doing so in mixed-age treatment programs.[245] Whether or not you can offer age-specific treatment options, your program needs to **create an environment that responds to older adults' needs** (Exhibit 2.2).

EXHIBIT 2.2. How Administrators Can Create a Treatment Environment Responsive to Older Adults[246]

Older adults have specific developmental needs. To create an environment that is responsive to older adults' needs, the entire organization, not just providers, must be committed to this purpose. Some of the strategies administrators can use to create an age-sensitive treatment or service environment include:

- Make a commitment to understanding the developmental needs and cohort differences.
- Review and update your vision and mission statement to reflect your commitment to older adults.
- Conduct an organizational self-assessment of attitudes, knowledge, and skills needed to effectively respond to older adults in your program.
- Conduct an organizational self-assessment of the physical environment and other barriers to access that must be addressed to provide services to older adults.
- Address organization-wide competence in the developmental needs of older adults and cohort differences in your strategic planning process.
- Assign one staff member to oversee the development of age-specific practices and services.
- Develop an advisory board or task group with older adult members from the community.
- Engage clients, staff, and community members in planning/developing age-specific services and programs.
- Develop and review policies and procedures to ensure that all staff are responsive to older adults' needs.
- Create an older adult-friendly environment that enhances engagement and retention of clients.
- Develop outreach strategies to improve access to care.

The consensus panel recommends that you engage your clients in discussions about their attitudes toward substance misuse, create an age-sensitive treatment environment that is responsive to older adults, and offer age-specific treatment options when possible.

Acknowledge and Address Older Adults' Diversity

The older adult population is as culturally diverse as other age groups. Yet **older adults who are members of racial/ethnic and other minority groups are often at greater risk of poor health, disability, social isolation, and poverty** than are their younger counterparts. Older adults from diverse racial and ethnic backgrounds are also more likely to be underinsured and receive fewer routine screenings for health concerns.[247] Therefore, they face more barriers to accessing health care and experience greater health disparities.[248] These **disparities increase risk for developing SUDs and increase barriers to treatment.**

> Higher rates of deaths, disability, and chronic illness are more common among older adults who identify with diverse racial and ethnic groups.[249]

Lesbian, gay, bisexual, transgender, and questioning (LGBTQ) older adults may experience poor health care and lack of access to services. Given discrimination and prejudice, they may have to hide, or feel the need to hide, their LGBTQ identity to receive care.[250]

Gender-related disparities can create or compound health disparities in older adults. Older women are at higher risk for co-occurring mental disorders and social isolation than older men.[251] They are also more likely to be prescribed medications (e.g., benzodiazepines) that negatively interact with alcohol and to be prescribed them for longer periods of time, increasing the risk of SUDs.[252]

OLDER WOMEN are at higher risk for **CO-OCCURRING** mental disorders and social isolation than older men.

Providers and program administrators must learn how older clients' race, ethnicity, sexual orientation, gender identity, and socioeconomic status influence overall health, substance misuse, and availability of healthcare and behavioral health services.[253] They should **also recognize that older adults can draw on their cultural heritage in ways that improve health and well-being.**[254]

> "As people age, they shape their world in ways that maximize their well-being … within the confines and definitions of their respective cultures."
>
> —H. H. Fung (2013), p. 375[255]

The consensus panel recommends that you maintain awareness of older adults' racial, ethnic, gender, and LGBTQ diversity when addressing late-life substance misuse, health disparities, and barriers to access to care. Provide culturally responsive screening, assessment, and treatment for clients across settings.

RESOURCE ALERT: IMPROVING CULTURAL COMPETENCE

The Substance Abuse and Mental Health Services Administration's (SAMHSA) TIP 59, *Improving Cultural Competence* (https://store.samhsa.gov/product/TIP-59-Improving-Cultural-Competence/SMA15-4849), helps providers and administrators understand the role of culture in the delivery of mental health services and SUD treatment.

Recognize the Difference Between Early- and Late-Onset Substance Misuse

Diagnosis and treatment planning differ for older adults who have a history of substance misuse (early onset) and those who develop problems only later in life (late onset). For example, older adults who begin to drink because of late-life stressors (e.g., loss of a significant other) may not have the same chronic, co-occurring medical conditions or mental disorders that older adults who have been drinking since adolescence or early adulthood have. Late-onset substance misuse may respond well to brief interventions. Older adults who exhibit chronic misuse may need more intensive SUD treatment.[256]

The consensus panel recommends that, as part of regular screening and assessment, you determine whether clients have a history of substance misuse or are using in response to more recent stressors. Use this information to identify appropriate treatment options. Discuss these options with clients.

Emphasize Client Education, Early Identification, Screening, and Brief Treatment

Substance misuse in older adults is often unrecognized by older adults themselves, as well as by their family members, friends, and healthcare and social service providers. To ensure that older adults receive education, screening, assessment, and treatment, all who have regular contact with them—whether in the home, at healthcare visits, at community-based senior services, or in long-term care facilities—must recognize the signs of substance misuse (including prescription drug misuse) in older adults.

Older adults are less likely to get referrals to specialized SUD treatment from healthcare providers than other sources (e.g., self-referral, referrals from legal incidents related to driving and substance misuse).[257] **Yet healthcare providers are well positioned to identify and screen for substance misuse** in older adults.

Older adults are more likely than younger adults to see their healthcare providers to discuss and receive treatment for numerous medical and health-related concerns. **Healthcare visits are opportunities to discuss substance use and related health risks and consequences.** Healthcare providers can also take these opportunities to talk with older clients about drug–drug interactions with alcohol, prescription medications, and other substances in the context of routine medical care.[258]

If you are a healthcare or social service provider who has contact with older adults in home-care situations, residential care facilities, community-based programs, or emergency departments, you should **be aware of the signs of substance misuse among this population. Within your scope of practice, you should engage in routine screening of older adults for substance misuse** in accordance with your program's policies and procedures.

A home healthcare nurse noticed empty beer bottles and the smell of alcohol on Joe's breath during one of her regularly scheduled home visits to monitor Joe's management of his diabetes. Joe also seemed unsteady on his feet. She recognized the signs of a potential problem and had a friendly conversation with him about his health in which she embedded screening questions about his drinking. Joe agreed to let her call his daughter to arrange for a ride for him to see his healthcare provider for an assessment.

A growing body of research demonstrates that different kinds of **brief interventions delivered in a variety of healthcare and social service settings can effectively reduce alcohol consumption and substance misuse** and lower health-related risk among older adults.[259,260,261,262,263] Brief interventions can also facilitate entry into more intensive treatment.[264]

The consensus panel recommends that providers across settings in which older adults may seek care:

- Promote early identification, education, outreach, and prevention in their programs/communities.
- Promote universal screening for alcohol misuse, drug use, and prescription medication misuse for older adults.
- Develop and expand brief interventions for older adults who misuse substances.

Engage in Health Risk Reduction Practices

Older adults who misuse substances may not want to set abstinence as their goal. Engaging in health risk reduction practices is an important and viable option for older adults and is consistent with age-sensitive treatment practices.[265] For example, medical providers can slowly taper older adults to the lowest possible doses of benzodiazepines without withdrawing them completely. Another health risk reduction approach specifically designed for older adults is the BRITE project, an adaptation of screening, brief intervention, and referral to treatment (SBIRT). It has demonstrated lowered alcohol severity and depression in older adults and improvements in medication misuse.[266] (See Chapter 3 of this TIP for more information on screening and assessment.)

Risk reduction strategies lower health-related risk for older adults and can boost functioning. Risk reduction can also be a first step toward abstinence. For example, once older adults who misuse alcohol begin to experience the health benefits of less drinking, they may be more willing to stop completely.

The consensus panel recommends engaging in health risk reduction practices to lessen the impact of substance misuse on the physical and mental health of older adults.

Provide Person-Centered Care

Based on a literature review and qualitative research, a consensus panel convened by the American Geriatrics Society determined that **a**

person-centered approach to care for older adults puts older adults' values and preferences at the center of the decision-making process regarding healthcare options and treatment goals.[267]

> "'Person-centered care' means that individuals' values and preferences are elicited and, once expressed, guide all aspects of their health care, supporting their realistic health and life goals. Person-centered care is achieved through a dynamic relationship among individuals, others who are important to them, and all relevant providers. This collaboration informs decision-making to the extent that the individual desires."
>
> —American Geriatrics Society (2015), p. 16[268]

Consider client needs and preferences when deciding treatment intensity (e.g., inpatient or outpatient), method (i.e., group or individual treatment), and goal choice (i.e., abstinence or reduction in use).

Collaborating with clients to develop treatment goals enhances positive outcomes.[269] Offer clients a menu of treatment options that fit their needs and preferences. Options should include the least intensive treatment approaches that are medically appropriate as well as more intensive alternatives.

More treatment leads to better outcomes, regardless of the level of care (e.g., residential versus outpatient treatment) or whether treatment is greater in intensity or greater in length of overall treatment. The more attention older clients receive, the more likely they are to improve.[270]

Continually reassess older clients' needs, treatment goals, priorities, and intensity of care throughout treatment. Maintaining clients at the center of the conversation is essential to this process.

The consensus panel recommends that you engage older clients in a comprehensive, person-centered, trauma-informed approach to SUD treatment that emphasizes their values, needs, and preferences. Offer a menu of care options, including the least intensive treatment approach.

Build Alliances With Age-Sensitive Engagement and Retention Strategies

Building a strong treatment alliance with each client fosters engagement and retention in treatment. The treatment alliance is a collaborative process based on agreement on treatment goals and tasks and a bond between you and your client.[271] A large body of research shows the alliance as significant in all kinds of helping relationships across a variety of treatment methods, including SUD treatment.[272]

Retention in SUD treatment predicts good outcomes for older adults regardless of treatment approach.[273] Retention refers to a client's length of time in treatment and adherence to treatment.

To engage and retain older adults in treatment, the following practices are helpful:

- **Recognize the importance of establishing a collaborative relationship** as the primary mechanism for engaging clients in treatment and supporting behavior change.
- **Create a culture of respect,** which is nonconfrontational, focuses on building older clients' sense of value and worth, acknowledges the wisdom of their own lived experience, and expresses confidence in their ability to participate in treatment and accomplish their treatment and recovery goals. Respect the customary social conventions of older adults' age cohort (e.g., refrain from swearing or using slang) and ask clients how they would like to be addressed and introduced to others.
- **Use proven treatment approaches** that have demonstrated effectiveness or shown promise with older adults in addressing substance misuse across a variety of settings. Such approaches include brief advice and brief interventions, SBIRT, motivational interviewing, supportive therapy, problem-solving therapy, individual therapy, and cognitive–behavioral therapy.[274,275]

- Match treatment to older adults' needs and levels of functioning.
  - Outpatient programs should provide services during daytime hours and assist clients with transportation. Offer in-home or telehealth support services to homebound older adults.
  - Inpatient and residential treatment programs should create an environment that is easy for older adults to navigate. Facilities should be well lighted and accessible to individuals with disabilities, and should have other accommodations as needed for older clients.
  - Programs should modify design and delivery of services to accommodate vision, hearing, and mild cognitive problems that develop or increase in later life.
  - A slower program pace, repetition of information and instructions, and allowing time for clients to integrate and respond to information and questions can enhance their learning and participation in program activities.
- **Implement age-sensitive group treatment approaches to meet older adults' needs and preferences.** Older adults, regardless of gender, tend to be more private and concerned about how much personal information they will share in a mixed-age group setting. They may not relate to or feel comfortable sharing their problems with younger adults.[276]
- **Use age-sensitive adaptions if your program only has mixed-age groups:** Emphasize privacy/confidentiality, accommodate physical needs, establish group norms for respect, and ensure older adults' voices are heard by creating opportunities to share without pressure to disclose.
- **Work with older clients to explore pros and cons of age-specific and mixed-age groups, and honor their preferences** if possible in your program. Age-specific groups for older adults should focus on topics such as grief and loss, trauma, social isolation, social pressure to drink, life-stage and role transitions, and coping skills specific to older adults (e.g., strategies for coping with loneliness).
- **Match older adults to groups** based on availability, primary substance use concerns, age-related issues, and client preference. If possible, match older adults who have experienced trauma to gender-specific groups and those with chronic pain to groups that address pain and medication misuse.

The consensus panel recommends incorporating into your program age-sensitive and age-specific treatment practices that engage clients and improve retention in treatment. (See Chapters 4 and 5 for additional information on treatment of older adults for AUD and other SUDs, respectively.)

Help Older Clients Use Social Networks and Community-Based Services

Older adults in long-term recovery from SUDs demonstrate better outcomes when they have social supports that promote abstinence.[277,278] Social networks for older adults in recovery include caregivers, family, friends, faith-based communities, peer recovery support services, and mutual-help groups.

Older adults' social networks frequently narrow because of retirement, loss of spouses or friends, or reduced ability to engage in activities outside the home. This can increase some older adults' isolation and contribute to substance misuse.[279]

Assess older adults' current social networks. Help them improve and use social supports to reduce isolation and support recovery from substance misuse.

CASE MANAGEMENT SERVICES

Case and care management (CCM) services are often the keys to better outcomes, particularly for older adults with SUDs or co-occurring medical conditions or mental disorders.[280] The CCM provider helps clients gain access to healthcare, addiction treatment, mental health, social, financial, education, employment, and other community-based services. CCM services can be provided by a nurse care manager, social worker, addiction treatment or mental health counselor, or a peer recovery support specialist. Programs serving older adults should either provide CCM or actively link clients to a CCM provider who can connect older adults and their families to community-based resources and services.

The consensus panel recommends that SUD treatment programs help older clients connect with social networks that promote recovery. Use a CCM approach to link clients actively to community services.

Encourage Family and Caregiver Involvement

Involving caregivers throughout treatment and ongoing recovery enhances retention and improves treatment outcomes for people with SUDs.[281] Include caregivers (e.g., family members or guardians) in the entire treatment and recovery process, with the permission of the older client. Caregivers and family members can be essential partners in helping older adults participate fully in treatment and recovery activities. For example, they can assist older adults who have mobility challenges and cognitive impairments that make it difficult to follow treatment and recovery plans without support.

Educate caregivers about how substance misuse can affect older adults' physical and mental health, as well as their relationships. Include them in counseling sessions that focus on recognizing relapse triggers, improving communication, and teaching constructive problem-solving skills. This knowledge will help them more effectively support the recovery of your older clients.

Family members are often both caregivers and case managers for older adults with SUDs. The stress of this responsibility and resulting neglect of their self-care can put them at risk for developing SUDs, worsening chronic medical conditions, or increasing vulnerability to stress-related illnesses.[282] Help caregivers reduce their stress levels and maintain their own mental, emotional, and physical health.[283] Encourage family members to take care of their own emotional, mental, and health needs and participate in community-based supports such as caregiver groups.

The consensus panel recommends that, with older clients' consent, providers across service settings involve caregivers in all aspects of older clients' treatment and recovery.

Coordinate Care and Develop Service Linkages

Develop linkages to appropriate services and maintain ongoing relationships with other providers to coordinate care across settings for older adults with SUDs. Doing so will increase successful referral outcomes.[284] Coordinated care involves establishing and strengthening referral streams and partnering with community-based resources serving older adults (e.g., local Area Agencies on Aging).

Referring older clients to other services is not a once-and-done event. It requires actively connecting clients to appropriate providers or services (e.g., a "warm handoff" in which you make a referral to another agency in person with the client present) and following up with clients to ensure that referral was successful.

Care coordination and management are especially important for older adults with co-occurring medical or mental disorders. For example, a client with an SUD in a healthcare setting who screens positive for anxiety or depression should receive a referral for further assessment and treatment to a mental health service clinician experienced in working with older adults who have co-occurring disorders. Consider availability, accessibility, and client preferences when making referrals to other providers or community-based services. In addition, stay informed of available services. Treatment options within a given agency may change frequently.

RESOURCE ALERT: DEVELOPING REFERRAL RESOURCES

SAMHSA's Toolkit *GET CONNECTED: Linking Older Adults With Resources on Medication, Alcohol, and Mental Health* (https://store.samhsa.gov/product/Get-Connected-Linking-Older-Adults-with-Resources-on-Medication-Alcohol-and-Mental-Health-2019-Edition/SMA03-3824) addresses developing and actively linking to referral resources for alcohol misuse prevention and treatment among older adults.

The consensus panel recommends that you establish ongoing relationships with providers across services and community-based programs to ensure active linkage of clients to older adult services, healthcare professionals who specialize in geriatrics, addiction treatment services, mental health services, and recovery resources.

Make Programmatic Changes To Effectively Serve Older Adults With SUDS

Before administrators and clinical supervisors can focus on workforce development, they must establish their organizations' vision and commitment to making programs more accessible to older clients and to creating new or adapting existing programs to accommodate older adults' unique needs. **Start with an organizational self-assessment and change plan** that includes:

- A rationale for providing age-sensitive and age-specific services.
- An assessment of the organization's strengths and needs for improving services for older adults.
- A review of priorities, goals, and tasks to help develop or augment existing services for older adults.
- A plan for adapting facilities and programs to accommodate the unique needs of older adults throughout the continuum of care. This includes establishing age-sensitive and age-specific policies and practices for outreach, universal screening for substance misuse, and enhancing access and flow of clients through the continuum of care from screening to brief intervention and referral or admission to SUD treatment and continuing care.
- A plan for identifying and developing linkages to community-based resources serving older adults.
- A plan for involving staff, older clients, and members of older adult programs and recovery-focused organizations in the planning and implementation of services.
- Guidelines for implementing organizational change that describe roles, responsibilities, timeframes, and specific activities for each step of the change process.[285]

In addition, administrators need to be aware of state-level variance in policies and practices, which can dictate the parameters and limitations of a program's features and implementation process.

The consensus panel recommends that you do an organizational self-assessment and have a plan in place before implementing any organization-wide changes to policies and practices.

Invest in Age-Sensitive Workforce Development

To implement older adult-specific SUD treatment programs and services successfully, program administrators must **hire and retain highly motivated staff who are committed to serving older adults.** To ensure staff are knowledgeable and have the skills to care for older adults with SUDs, **engage in ongoing workforce development practices:**[286,287]

- Develop staff recruitment, retention, and promotion strategies that engage clinical and program staff who are knowledgeable about older adult health, mental health, and substance misuse and are motivated to work with this population.
- Recruit older peer recovery support providers and create a work environment that recognizes lived experience as a valuable source of knowledge.
- Develop pathways for integrating older peer recovery support providers into service teams and provide them with ongoing supervision and professional development opportunities.
- Create training plans and curriculums that address ageism, health disparities, and cultural diversity among older adults; the culture of aging; physical and mental health needs of older adults; and treatment practices and evidence-based approaches that are effective with older adults.
- Provide ongoing clinical and administrative supervision that emphasizes the attitudes, knowledge, and skills required to care for older adults.
- Evaluate staff performance on the attitudes, knowledge, and skills required to care for older adults.

The consensus panel recommends that you implement workforce development strategies for building or improving age-sensitive and age-specific treatment for older adults with SUDs.

Summary

The principles of care this TIP describes will support efforts to develop and improve age-sensitive and age-specific services for older adults with SUDs. The key to implementing these principles is to work collaboratively with staff, older clients, other providers, and community stakeholders to foster awareness and commitment to providing quality services to older adults and their families.

Chapter 2 Resources

Provider Resources

American Psychological Association (APA)—*Guidelines for Psychological Practice With Older Adults* (www.apa.org/pubs/journals/features/older-adults.pdf): These guidelines provide information on evaluating psychologists' readiness for working with older adults; this information is also applicable to other behavioral health service providers.

APA—*Multicultural Competency in Geropsychology* (www.apa.org/pi/aging/programs/pipeline/multicultural-competency.pdf): This report describes behavioral health service providers' multicultural competencies for working with older adults.

Council on Social Work Education—Gero-Ed Center (www.cswe.org/Centers-Initiatives/CSWE-Gero-Ed-Center.aspx): The center's website provides resources, educational materials, and a curriculum to enhance social work competencies, which apply to all behavioral health service providers caring for older adults.

Institute of Medicine (IOM)—*The Mental Health and Substance Use Workforce for Older Adults: In Whose Hands?* (www.nap.edu/download/13400; download for free as a guest): The IOM provides this report as an overview of the eldercare workforce and workforce development barriers and needs. (IOM is now the National Academy of Medicine.)

Office of Minority Health—National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care (https://thinkculturalhealth.hhs.gov/clas): These standards describe principles of culturally appropriate services applicable to treating culturally diverse older adults in healthcare and behavioral health service settings.

Understanding Issues Facing LGBT Older Adults (www.lgbtmap.org/file/understanding-issues-facing-lgbt-older-adults.pdf): This report from the Movement Advancement Project and SAGE helps providers and others better understand the social isolation and health challenges that affect many LGBT older adults.

Chapter 3—Identifying, Screening for, and Assessing Substance Misuse in Older Adults

KEY MESSAGES

- Behavioral health service and healthcare providers in any setting should screen older clients for substance misuse. Many different healthcare providers can play a role in this. There is no "wrong door" through which older adults can arrive at the right diagnosis and care.
- The main reason for screening and assessment is to help you decide whether, where, and how to address substance misuse.
- Substance misuse affects older adults differently than it does middle-aged and younger adults. Providers across settings should be trained in giving age-appropriate care. They also need to have the skills to recognize substance misuse in older clients.

Chapter 3 of this Treatment Improvement Protocol (TIP) will most benefit providers. It discusses identifying, screening for, and assessing substance misuse in older clients. In the United States and elsewhere, more and more people ages 50 and older struggle with substance misuse, but many providers do not screen for, diagnose, or treat substance use disorders (SUDs) among this population.

OLDER ADULTS are less likely to be screened for **SUBSTANCE MISUSE** and more likely to be taking **MULTIPLE** medications.

Older adults are less likely than younger adults to receive screening and assessment for substance misuse.[288] This is potentially dangerous because, as people age, they are more likely to feel the negative effects of drugs and alcohol. Older adults are also more likely to take multiple medications, which means they may face dangerous and potentially fatal drug–drug interactions. Furthermore, identifying substance misuse in older adults is not simple. The signs and symptoms of substance misuse can be easily mistaken for normal aging or physical or mental disorders common in older populations.

Even so, substance misuse is detectable and treatable among older adults. Yet if left untreated or poorly treated, it can shorten their lives and keep them from living healthily and independently. For example, substance misuse increases the risk of falls, cognitive impairment, overdose, heart disease, high blood pressure, certain cancers, HIV, hepatitis, cirrhosis, and mental disorders.[289,290]

This chapter of TIP 26 will help behavioral health service providers, social service providers, and other healthcare providers who work with older adults better understand how, when, and why to use screening and assessment to address substance misuse in their older clients.

Who Can Benefit From Chapter 3 of This TIP and How?

Chapter 3 will support behavioral health service and healthcare providers who work with older adults in overcoming barriers to identifying, screening for, and assessing substance misuse in older clients by helping these providers:

- Recognize early warning signs of substance misuse in older adults.

- Understand the relationship between substance misuse and depression, anxiety, trauma, and problems with thinking (also called cognitive impairment).
- Become more aware of common myths about substance misuse in older adults.

Who in the geriatric workforce should be identifying, screening for, or assessing substance misuse in older adults? Nearly everyone! The Institute of Medicine report *The Mental Health and Substance Use Workforce for Older Adults: In Whose Hands?*[291] notes that the full range of providers should help meet the needs of older adults who misuse substances. These providers include:

- Mental health service and SUD treatment providers, including psychiatrists, psychologists, social workers, psychiatric nurses, and addiction counselors.
- Primary care providers, general internists, family medicine practitioners, trained pharmacists, advanced practice registered nurses, and physician assistants.
- Geriatricians, geriatric nurses, geriatric psychiatrists, geropsychologists, and gerontological social workers.
- Direct care workers who provide in-home support services.
- Peer recovery support service providers.
- Informal and formal caregivers.
- Supports within the faith community.
- Social service providers.

Chapter 3 will be useful across settings in which these workers encounter older adults. No single service provider or setting is solely responsible for making sure older adults receive the substance use-related care they need. However, all providers and settings can fulfill an important role.

Organization of Chapter 3 of This TIP

Chapter 3 offers a wide range of information and strategies to help you screen, assess, and treat older clients for substance misuse.

The first section of Chapter 3 is about the challenges to screening and assessing older clients for substance misuse. It also discusses why you need to screen and assess these clients. You will be more likely to use screening and assessment once you understand why they are so important. In the end, this will help your clients increase their chances for recovery.

The second section discusses how to screen for substance misuse in older adults. Screening for substance misuse also includes screening for co-occurring mental and neurocognitive disorders that can affect (and are affected by) substance use, such as depression, anxiety, posttraumatic stress disorder (PTSD), and dementia. Knowing why, how, and whom to screen for substance misuse and co-occurring mental or neurocognitive disorders will help you provide more complete care. It also increases the chances of clients receiving the correct diagnosis and needed treatment.

The third section describes how to use brief assessments—an important follow-up to screening—for clients who screen at risk for substance misuse and co-occurring mental or neurocognitive disorders. Brief assessment helps make or rule out diagnoses and aids you and your clients in making appropriate shared treatment decisions.

The fourth section describes how to fully assess older adults who screen positive for moderate-to-severe substance misuse. A full assessment does more than just ask clients about substance use. It also asks about their overall health and well-being. This will give you a more complete picture of your clients' substance-related issues and will help you understand how substance misuse affects them.

The fifth section guides providers in treatment planning, treating, or referring for treatment. Knowing how and why to screen and assess is only half the picture. Understanding what steps to take in offering effective care or referral for care is a cornerstone of good clinical practice.

The final section identifies targeted resources to support your practice, from screening to referral. A more detailed resource guide is available in Chapter 9 of this TIP.

For definitions of key terms you will find in Chapter 3 of this TIP, see Exhibit 3.1.

EXHIBIT 3.1. Key Terms

- **Addiction*:** The most severe form of SUD, associated with compulsive or uncontrolled use of one or more substances. Addiction is a chronic brain disease that has the potential for both recurrence (relapse) and recovery.
- **Age-specific:** Treatment approaches and practices specifically developed for older adults (e.g., an older adult specialty group in a mixed-age SUD treatment program).
- **Alcohol misuse:** The use of alcohol in any harmful way, including heavy drinking, binge drinking, and alcohol use disorder (AUD).
- **At-risk/high-risk drinking:** Drinking alcohol in excessive amounts. This definition encompasses both binge drinking and heavy drinking. Additionally, any alcohol consumption is considered risky when carried out by individuals with certain medical conditions that are worsened by alcohol, those taking medicine that can interact harmfully with alcohol, those driving a car or engaged in other activities that require alertness, or people recovering from AUD.[292,293] Note that for purposes of this TIP, at-risk drinking and high-risk drinking are synonymous, and either term is acceptable to describe an older adult's drinking patterns.
- **Binge drinking:** A drinking pattern that leads to blood alcohol concentration levels of 0.08 grams per deciliter or greater. This usually takes place after four or more drinks for women and five or more drinks for men.[294,295] However, older adults are more sensitive to the effects of alcohol, and treatment providers may need to lower these numbers when screening for alcohol misuse.[296] Additionally, other factors such as weight, decrease in enzyme activity, and body composition (e.g., amount of muscle tissue present in the body) can also affect alcohol absorption rates.
- **Caregivers:** Informal caregivers provide unpaid care. They assist others with activities of daily living (ADLs), including health and medical tasks. Informal caregivers may be spouses, partners, family members, friends, neighbors, or others who have a significant personal relationship with the person who needs care. Formal caregivers are paid providers who offer care in one's home or in a facility.[297] Most older adults do not need caregivers and are as able to address their own needs as younger adults, whether or not substance misuse is a factor in their lives.
- **Drug–drug interaction:** The interaction of one substance (e.g., alcohol, medication, an illicit drug) with another substance. Drug–drug interactions may change the effectiveness of medications, introduce or alter the intensity of side effects, and increase a substance's toxicity or the concentration of that substance in a person's blood. Potentially serious interactions can also occur with certain foods, beverages, and dietary supplements.[298]
- **Heavy drinking:** Consuming five or more drinks for men and four or more drinks for women in one period on each of 5 or more days in the past 30 days.[299]
- **Illicit substances:** Illicit substances include cocaine, heroin, hallucinogens, inhalants, methamphetamine, and prescription medications that are taken other than as prescribed (e.g., pain relievers, tranquilizers, stimulants, sedatives).
- **Moderate drinking:** According to the 2015–2020 *Dietary Guidelines* for Americans, moderate drinking is defined as up to two drinks per day for men and up to one drink per day for women.[300,301] However, the Centers for Disease Control and Prevention (CDC) notes that these numbers apply to any given day and are not meant as an average over several days.[302] Additionally, individuals who don't metabolize alcohol well may need to consume even lower quantities. Some people, particularly those with certain alcohol-related illnesses or engaging in tasks requiring concentration, should not consume alcohol at all. The *Dietary Guidelines* stipulate that those who don't drink should not begin drinking for any reason.[303]

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- **Psychoactive substances:** Substances that can alter mental processes (e.g., cognition or affect; in other words, the way one thinks or feels). Also called psychotropic drugs, such substances will not necessarily produce dependence, but they have the potential for misuse or abuse.[304]
- **Recovery*:** A process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential. Even individuals with severe and chronic SUDs can, with help, overcome them and regain health and social function. This is called remission. When those positive changes and values become part of a voluntarily adopted lifestyle, that is called being in recovery. Although abstinence from all substance misuse is a cardinal feature of a recovery lifestyle, it is not the only healthy, prosocial feature.
- **Relapse*:** A return to substance use after a significant period of abstinence.
- **Remission:** A medical term meaning a disappearance of signs and symptoms of the disease or disorder. The fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) defines remission as present in people who previously met SUD criteria but no longer meet any SUD criteria (with the possible exception of craving).[305] Remission is an essential element of recovery.
- **Screening:** A process for evaluating the possible presence of a specific problem. The outcome is normally a simple yes or no.
- **Screening, brief intervention, and referral to treatment (SBIRT):** An evidence-based, comprehensive, integrated public health approach to identify, reduce, and prevent misuse of and dependence on alcohol and illicit drugs.
- **Substance misuse*:** The use of any substance in a manner, situation, amount, or frequency that can cause harm to users or to those around them. For some substances or individuals, any use would constitute misuse (e.g., underage drinking, injection drug use).
- **Substance use disorder*:** A medical illness caused by repeated misuse of a substance or substances. According to DSM-5,[306] SUDs are characterized by clinically significant impairments in health and social function, and by impaired control over substance use. They are diagnosed through assessing cognitive, behavioral, and psychological symptoms. SUDs range from mild to severe and from temporary to chronic. They typically develop gradually over time with repeated misuse, leading to changes in brain circuits governing incentive salience (the ability of substance-associated cues to trigger substance seeking), reward, stress, and executive functions like decision making and self-control. Multiple factors influence whether and how rapidly a person will develop an SUD. These factors include the substance itself; the genetic vulnerability of the user; and the amount, frequency, and duration of the misuse. Note: A severe SUD is commonly called an addiction. A mild SUD is generally equivalent to what previous editions of DSM called substance abuse; a moderate or severe SUD is generally equivalent to what was formerly called substance dependence.

* The definitions of all terms marked with an asterisk correspond closely to those given in *Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health*. This resource provides a great deal of useful information about substance misuse and its impact on U.S. public health. The report is available online (https://addiction.surgeongeneral.gov/sites/default/files/surgeon-generals-report.pdf).

Challenges to Identification, Screening, and Assessment

Some health experts have called older adults who misuse substances an "invisible" population.[307,308] Although older adults have frequent medical visits, behavioral health or healthcare providers often do not recognize substance misuse in their older clients.

Older clients are less likely than younger clients to tell you that they are having a problem with substance use and are less likely to ask for treatment.[309] Some barriers older adults face are unique to their population. **Older adults' substance misuse can stay "hidden" when:**[310]

- **Providers believe that older clients do not have alcohol or drug problems later in life.** ("Drug use is a young person's problem." Or, "No one starts abusing alcohol in their 60s.")
- **Providers have negative thoughts and attitudes about aging.** This is also called ageism. ("Talking about drugs and alcohol with someone who is older is a waste of time." Or, "He's 83 years old and has been drinking his whole life. He's never going to change, so why bother?" Or, "Older people are less likely to change or benefit from treatment.")
- **Providers feel uncomfortable talking about substance use and misuse** with older adults. ("Given his age, I don't want to be disrepectful or tell him what to do.")
- **Family members feel uncomfortable asking an older relative to stop using substances—** especially alcohol. ("I'd rather not ask Mom to stop drinking. I'd be taking away her one last pleasure in life.")
- **Providers lack knowledge** about drug and alcohol screening and assessment tools. ("I don't know the first thing about how to look for addiction problems in older clients.")
- **Providers and family members misunderstand the difference between symptoms of substance misuse and similar symptoms** of physical and cognitive decline or mental illness common in older populations. Such problems include dementia, pain, anxiety, and depression. ("At her age, it's normal to forget people's names. Drinking has nothing to do with it," or, "Dad's not depressed; he just lost his 'pep' in getting older.")
- **Providers believe that they don't have enough time** to give screening and assessment measures. ("I barely have time to see all my clients. There's just no time for screening and assessment.")
- **Older adults experience substance-related functional impairment,** which providers may have a hard time detecting in older clients who no longer work, drive, or have significant obligations to others professionally or at home.
- **Older adults seek services in nontraditional addiction treatment settings.**
- **Providers spend too little time with clients** (and older adults in particular).

To remove these barriers, providers need education and skills training aimed at helping them better recognize possible substance misuse in their older clients.

To spot substance misuse in older clients as early as possible, tailor your approach to working with them:

- Be aware of your beliefs about/attitudes toward older clients that make you not screen for substance misuse.
- Choose a method for drug and alcohol screening that you can use with all older clients.
- Use an interview style that older clients will find comfortable (e.g., supportive).
- Train counselors on how to spot substance misuse early.

Screening for Substance Misuse in Older Adults

Substance misuse is common among clients seen in healthcare[311] and behavioral health service settings. Although most older adults do not misuse substances, some do. Consider these facts, which show that **substance misuse does occur in older people:**

- In 2019, estimates showed that 4.7 million adults ages 50 and older had a past-year SUD.[312]

- In 2019, an estimated 8.8 million adults ages 50 and older reported using an illicit drug in the past month.[313]
- In 2019, more than 56 million adults ages 50 and older were estimated to have engaged in past-month alcohol use.[314]
- The rate of prescription opioid misuse among older adults (ages 60 and older) is lower than among younger adults (ages 20 to 59), but from 2006 to 2013, older adults increasingly misused prescription opioids with suicidal intent and showed an increasing trend in death rate.[315]

Know the different types of prescription medications older clients may misuse. These include:

- Sedative-hypnotics: These medications are often used to help people relax or sleep. They include barbiturates (like amobarbital and secobarbital) as well as benzodiazepines (like lorazepam and alprazolam).
- Opioid analgesics: These medications are often prescribed to provide pain relief by attaching to opioid receptors in the brain. Examples include oxycodone and hydrocodone.

Why, When, and How To Screen

The TIP consensus panel recommends that addiction treatment, other behavioral health service, and healthcare providers screen for alcohol, tobacco, prescription drug, and illicit drug use in all older clients at least annually. The TIP consensus panel recommends performing universal screening during health visits.

Screening and assessment are very important steps in diagnosing substance misuse and making the right care decisions. **Screening can help you answer the following important questions:**

- **Does my client need an assessment?** Although the two terms are often confused for one another, "screening" is not the same as "assessment."
- **Screening** is the process of evaluating whether symptoms of substance misuse are present. Screening helps you decide whether further assessment is necessary.
- **Assessments** give detailed information for diagnosis, treatment decisions, and treatment planning.
- **Is my client's substance use potentially harmful?** Screening can help you learn whether a client's alcohol or drug use could be harmful because of an existing condition or use of prescription medications. In some cases, any substance use at all may be harmful. Many older clients have chronic medical illnesses and take more than one prescription medication. Combining drugs and alcohol with medications can be dangerous and even lead to death. Drug and alcohol use can also make certain illnesses worse and keep clients from feeling their best.
- **Does my client seem afraid to ask for help?** Screening is necessary because older clients are less likely than younger clients to ask directly for help.[316] However, older adults are diverse, and older adults from the baby boomer generation (birth dates 1946 through 1964) may be more willing to discuss SUD and mental illness with their healthcare providers than earlier generations. Screening is helpful when clients feel afraid or ashamed of revealing their problem spontaneously.

SUDs are chronic conditions. You can help older clients feel less shame and stigma by talking about substance misuse in the same way you would a mental disorder, like depression or anxiety. Use basic terms rather than confusing or judgmental language. Be sure to also ask about their overall health, functioning, and well-being. This shows clients that you are concerned and feel empathy for them rather than making them feel like their substance use is a consequence of weak willpower or a personal flaw.

- **My client doesn't seem to meet diagnostic criteria for an SUD. Could this person still be misusing substances?** Screening is initially more useful than relying solely on DSM-5 diagnostic criteria. Most older adults who misuse substances do not meet full DSM-5 criteria for a specific SUD but may be engaging in risky use of substances. This is because several key criteria are not typically present in older adults.

For example, older adults have lower tolerance for substances like alcohol than younger and middle-aged adults and may experience harmful effects at lower amounts of consumption than younger adults. Compared with younger and middle-aged adults, older adults are significantly less likely to endorse the *Diagnostic and Statistical Manual of Mental Disorders*, 4th Edition (DSM-IV) alcohol abuse criterion for alcohol use in "physically hazardous" situations.[317]

- **Does my client need SUD treatment?** Screening can lead to earlier treatment, and thus, better health.[318]

The U.S. Preventive Services Task Force (USPSTF) recommends that healthcare providers screen for unhealthy alcohol use in adults age 18 years or older and provide people engaged in risky or hazardous drinking with brief behavioral counseling interventions to reduce unhealthy alcohol use (www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryDraft/unhealthy-alcohol-use-in-adolescents-and-adults-screening-and-behavioral-counseling-interventions).

Chapter 3 will help you decide which screening tools to use, how and when to administer them, and who should do so. Every practice should select screening tools and develop procedures for who will give the screenings and when to give them. You can select screening measures based on which substances you want to ask about (Exhibit 3.2). Be aware that not all of these measures have been validated—in other words, tested and approved for use—in older adults. Your practice should also identify steps to take when screening tests are positive (see the section "Communicating Screening Results").

No screeners have been statistically validated for assessing prescription or over-the-counter (OTC) medication misuse that would identify accidental misuse or noncompliance issues. Nevertheless, healthcare and behavioral health service providers should assess how older adults use such medications, with an eye toward potential adverse reactions and interactions. **The American Geriatrics Society's 2019 Beers Criteria® address medications that are potentially inappropriately prescribed for older adults.**[319] See the Chapter 6 text box on the 2019 Beers Criteria®.

EXHIBIT 3.2. Drug and Alcohol Screening Tools

Alcohol:

- Alcohol Use Disorders Identification Test (AUDIT)
- Alcohol Use Disorders Identification Test-C (AUDIT-C)
- Short Michigan Alcoholism Screening Test-Geriatric Version (SMAST-G)
- Senior Alcohol Misuse Indicator (SAMI)

Cannabis:

- Cannabis Use Disorder Identification Test-Revised (CUDIT-R)

Multiple substances:

- Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST)
- Brief Addiction Monitor
- CAGE Adapted to Include Drugs (CAGE-AID)
- National Institute on Drug Abuse (NIDA) Quick Screen V1.0

Screen older clients for substance misuse at intake. Screen regularly, before starting new medication, and when potentially substance-related problems arise, such as injury or accidents. Have clinical assistants administer screening instruments in an interview or as part of other health screenings. **Provide a paper or digital tablet version for clients to complete by themselves. USPSTF recommends electronic screening and brief intervention as an effective strategy** to prevent excessive alcohol use.[320] Some older adults may not be comfortable using computers or tablets. Others may have difficulty reading or writing. Be sensitive to each client's skills and abilities when selecting screening formats.

Review screening results and discuss them with clients. Help clients understand their risk levels and the consequences of substance misuse. Gauge motivation and readiness for change. Keeping an open, nonjudgmental attitude will help your clients feel more comfortable sharing more information with you.

Make sure you have the required training and credentials or licensure before performing screening, assessment, or diagnosis. If no providers in your program have appropriate licenses or credentials to screen, assess, or diagnose clients for mental disorders, refer clients to another program for those needs. Also make sure you review the training requirements on administration and scoring; formal training may be required prior to using some instruments. When formal training is unnecessary, learn how to give each screening measure and assessment; instructions and scoring may vary depending on population demographic features and other factors.

Federal guidelines for moderate drinking are as follows:[321,322,323]

Overall consumption that minimizes risk and can help avoid alcohol-related problems includes:

- No more than one standard drink a day for women and no more than two standard drinks a day for men.
- These numbers apply to any given day and are not meant as an average over multiple days.

However, guidelines do not recommend that individuals who do not drink alcohol start drinking for any reason.[324]

Older adults should not drink any alcohol if they:

- Are taking alcohol-interactive prescription medications, especially psychoactive prescription medications (e.g., opioid analgesics, benzodiazepines).
- Have medical conditions that can be made worse by alcohol (e.g., diabetes, heart disease).
- Are planning to drive a car or participate in other activities requiring alertness and skill.
- Are recovering from AUD.

Substance Misuse Screening Measures Appropriate for Use With Older Adults

This section discusses examples of substance misuse screening instruments useful for older adults. A full selection of screening resources appears in the Chapter 3 Appendix. Many tools described here were developed specifically for older adults. Some are self-report tools (i.e., clients complete the tools themselves); a behavioral health service provider must deliver others. Older clients may have limited vision or difficulty writing and may need help completing screens.

Alcohol Screening

USPSTF recommends screening adults for alcohol misuse,[325] including screening for risky drinking and AUD **with brief instruments like the AUDIT-C.** USPSTF also recommends brief counseling for clients who engage in risky drinking.[326,327]

A very brief "prescreen," especially for alcohol misuse, can be easily incorporated into healthcare clinic or social service agency screening protocols. A short prescreen is not burdensome as a universal screening tool. However, many clients will be ruled negative for problematic use. If results are positive, more comprehensive assessments can be administered to determine severity and make treatment recommendations.

For more information about alcohol screening, see the "Screening and Assessment" section in Chapter 4 of this TIP.

AUDIT

The AUDIT was developed to screen for heavy alcohol use. It can reveal alcohol misuse in people ages 65 and older.[328] The first three AUDIT questions measure alcohol intake and are known as the AUDIT-C. Use the AUDIT or the AUDIT-C to get more detailed information from clients who use alcohol. The AUDIT has demonstrated reliability in studies of AUD screening.[329] The AUDIT (self-report version) and the AUDIT-C are available in the Chapter 3 Appendix.

SAMI

The SAMI[330] is a five-item questionnaire for older adults who may engage in risky alcohol use. This questionnaire includes a checklist of symptoms and open-ended questions about alcohol use.[331] A score of 1 or higher suggests problem alcohol use. The SAMI is available in the Chapter 3 Appendix.

SMAST-G

The SMAST-G is the first brief alcohol misuse screener developed for older adults. If a client marks two or more items on the SMAST-G with a "yes" response, that suggests potential alcohol misuse.[332] The SMAST-G is available in the Chapter 3 Appendix.

Cannabis Screening

CUDIT-R

The CUDIT-R[333] measures cannabis misuse in the past 6 months. Developed from the AUDIT measure, it is a short version of the 20-item CUDIT screener. A score of 12 or higher means you should assess for cannabis use disorder. Yet this cutoff score has not been tested thoroughly. Do not assume that a score below 13 means the client does not misuse cannabis.[334] The CUDIT-R is available in the Chapter 3 Appendix.

Screening for Multiple Substances

ASSIST

ASSIST screens clients for all categories of substance misuse, including alcohol and tobacco (see "Resource Alert: The ASSIST Screener"). This World Health Organization (WHO) screener also measures substance-specific risk. Many providers do not use the ASSIST because it is long and somewhat hard to score. A computer version and a shorter version (ASSIST-Lite; see https://eassist.adelaide.edu.au/#/eassist-lite for a computer version) are available and easier to use.[335,336,337]

RESOURCE ALERT: THE ASSIST SCREENER

The full version of WHO's ASSIST screener, scoring system, and client feedback guidance can be downloaded in multiple languages (www.who.int/substance_abuse/activities/assist_test/en).

Brief Addiction Monitor

The Brief Addiction Monitor is a 17-item scale originally made for the Veterans Health Administration healthcare system.[338] **It can indicate the severity of a client's substance misuse and show how people in treatment or recovery are doing.[339]** The Brief Addiction Monitor asks about risk factors for substance misuse (e.g., craving, family or social problems) as well as factors that protect against substance misuse (e.g., social supports for recovery, religion or spirituality). This instrument is available at www.mentalhealth.va.gov/communityproviders/docs/bam_continuous_3-10-14.pdf.

CAGE-AID

The CAGE (Cut down, Annoyed, Guilty, Eye opener) Questionnaire is widely used to screen for risk of alcohol misuse. A similar version, **the CAGE-AID,[340] asks about substance misuse.** A "yes" response on any of the questions can mean substance misuse is present. However, the CAGE-AID does not ask about certain important aspects of substance use, including past substance use, frequency of use, and effects of using the substance. The CAGE-AID should be used with, but not in place of, longer and more detailed alcohol and drug screeners. It is available at www.hiv.uw.edu/page/substance-use/cage-aid.

NIDA Quick Screen V1.0

The NIDA Quick Screen V1.0 is a brief screener that asks about a client's past-year use of alcohol, tobacco, prescription drugs (nonmedical use), and illegal drugs. If a client answers "yes" to the question about using illegal drugs, follow up by giving a slightly longer screening tool called the NIDA-Modified ASSIST V2.0. Both tools are available on NIDA's website (www.drugabuse.gov/sites/default/files/pdf/nmassist.pdf).

Screening for Co-Occurring Disorders and Conditions

Co-Occurring Mental Disorders

Many older people who misuse substances also have co-occurring mental disorders. Some of these disorders, like major depressive disorder (MDD), anxiety, and PTSD, have symptoms similar to those seen in substance misuse and in cognitive impairment. You might at times have difficulty telling these conditions apart from one another. Co-occurring mental disorders can make substance misuse worse or result from substance misuse. You might be surprised to learn that:

- In 2019, approximately 1.7 million U.S. adults ages 50 and older had an SUD and a mental disorder.[341]
- Approximately 36.8 percent of adults older than age 50 with SUDs also have mental disorders, and 10.7 percent of adults over 50 with mental disorders also have SUDs.[342]
- SUDs in older adults often occur alongside depression and other affective disorders, psychosis, and cognitive disorders (e.g., dementia).[343,344]
- Older people with serious mental illness (SMI; complex mental disorders like bipolar disorders and schizophrenia) are especially likely to misuse substances compared with older adults without SMI,[345] but more research is needed. For example, of more than 7,000 adults ages 50 and older receiving inpatient services for SMI, 26 percent also met criteria for an SUD.[346] The most common SUD was for cocaine (9.5 percent).

In 2019, approximately **1.7M** Americans 50 and older were living with an SUD & a **MENTAL DISORDER.**

- **For older adults with both an SUD and a mental disorder, alcohol misuse and depression are a common combination.**[347] Having these two co-occurring disorders (CODs) may lead to negative physical and behavioral health consequences. For example, in a study of adults ages 65 and older who were receiving inpatient treatment for depression, those with co-occurring alcohol misuse had higher rates of drug use, liver disease, and suicidality than older adults with depression who did not also misuse alcohol.[348]

Be sure to screen older clients who misuse substances for co-occurring mental and cognitive disorders as well. Exhibit 3.3 indicates which screening measure to use by specific disorder, plus it lists a screening instrument for elder abuse. Older adults may also be at risk for negative outcomes, including:

- Increased mortality.[349]
- Increased risk of unintentional injuries leading to emergency department service use.[350]
- Increased risk of self-harm.[351] Older adult men are at especially high risk for suicide. Older adults with CODs may also have an increased risk of suicide attempt, but this requires more research.[352]
- Self-medication through substance misuse.

EXHIBIT 3.3. Screening Tools for Co-Occurring Mental and Cognitive Disorders

Co-occurring conditions in general	• Comorbidity Alcohol Risk Evaluation Tool (CARET)
Depression	• Geriatric Depression Scale (GDS)–Short Form • Patient Health Questionnaire-9 (PHQ-9)
Anxiety	• Geriatric Anxiety Scale (GAS) • Penn State Worry Questionnaire (PSWQ)
PTSD, trauma symptoms, and elder abuse	• PTSD Checklist for DSM-5 • Primary Care PTSD Screen for DSM-5 • Elder Abuse Suspicion Index© (EASI©)
Cognitive impairment	• Mini-Cog©

CARET

You can screen for CODs using the CARET, which was developed from the short version of the Alcohol-Related Problems Survey.[353] Research supports using the CARET with older adults[354,355] to identify those at risk for alcohol misuse. The CARET asks about alcohol-related risk factors and risky behaviors—many of which you may see in older clients. Such risk factors and risky behaviors include using alcohol while also:

- Having physical conditions negatively affected by drinking (like high blood pressure and diabetes).
- Having a history of falls or accidents.
- Having memory problems.
- Having trouble sleeping.
- Feeling sad or "blue."
- Taking medications that can be harmful when mixed with alcohol. These include arthritis and pain medications, depression medications, blood thinners, antiseizure medications, and sleep medications.
- Driving a car or other vehicle.

For more information about the items in the CARET and how to score them, please see Barnes et al., 2010.[356]

Depression Screening

Make sure to screen for depression. Depression is both a risk factor for and an outcome of substance misuse in older individuals.[357] Approximately 4.7 percent of adults in the United States ages 50 and older have depression.[358] MDD is commonly found in older clients who misuse substances.[359,360]

GDS–Short Form

One of the most commonly used depression screeners for older adults is the short form of the GDS[361] (Exhibit 3.4). Clients with a GDS score of 6 or higher need further assessment and may need treatment for MDD.[362] Clients with a GDS score below 6 should be screened again in 1 month if symptoms of depression are still present.[363] If a client's depressive symptoms are no longer present in 1 month, give the depression screener again in 6 months.[364]

EXHIBIT 3.4. Geriatric Depression Scale (GDS)–Short Form

Client Version

Client's Name: Date:

Instructions: Circle the best answer for how you felt over the past week.

1.	Are you basically satisfied with your life?	Yes	No
2.	Have you dropped many of your activities and interests?	Yes	No
3.	Do you feel that your life is empty?	Yes	No
4.	Do you often get bored?	Yes	No
5.	Are you in good spirits most of the time?	Yes	No
6.	Are you afraid that something bad is going to happen to you?	Yes	No
7.	Do you feel happy most of the time?	Yes	No
8.	Do you often feel helpless?	Yes	No
9.	Do you prefer staying at home, rather than going out and doing new things?	Yes	No
10.	Do you feel you have more problems with memory than most people?	Yes	No
11.	Do you think it is wonderful to be alive now?	Yes	No
12.	Do you feel pretty worthless the way you are now?	Yes	No
13.	Do you feel full of energy?	Yes	No
14.	Do you feel that your situation is hopeless?	Yes	No
15.	Do you think that most people are better off than you are?	Yes	No

Scoring Version

Client's Name: Date:

Scoring: Count boldface responses for a total score. A score of 0–5 is normal. A score of 6 or above suggests depression.

Instructions: Circle the best answer for how you felt over the past week.

1.	Are you basically satisfied with your life?	Yes	**No**
2.	Have you dropped many of your activities and interests?	**Yes**	No
3.	Do you feel that your life is empty?	**Yes**	No
4.	Do you often get bored?	**Yes**	No
5.	Are you in good spirits most of the time?	Yes	**No**
6.	Are you afraid that something bad is going to happen to you?	**Yes**	No
7.	Do you feel happy most of the time?	Yes	**No**
8.	Do you often feel helpless?	**Yes**	No

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9.	Do you prefer staying at home, rather than going out and doing new things?	**Yes**	No
10.	Do you feel you have more problems with memory than most people?	**Yes**	No
11.	Do you think it is wonderful to be alive now?	Yes	**No**
12.	Do you feel pretty worthless the way you are now?	**Yes**	No
13.	Do you feel full of energy?	Yes	**No**
14.	Do you feel that your situation is hopeless?	**Yes**	No
15.	Do you think that most people are better off than you are?	**Yes**	No

The Client Version and Scoring Version of the GDS–Short Form were both adapted from material in the public domain.[365]

PHQ

The nine-item PHQ-9 is commonly used to screen for depression in adults of any age.[366] **It is tested and approved for use with older clients.**[367] The PHQ-9 is also useful for monitoring depression severity and treatment response in clients who already screened positive for or are diagnosed with depression. The PHQ-9 is available via https://cde.drugabuse.gov/instrument/f226b1a0-897c-de2a-e040-bb89ad4338b9.

A two-item version of the PHQ-9 is available (the PHQ-2) that includes only the first two questions from the PHQ-9. However, compared with the **PHQ-9, the PHQ-2 has a higher likelihood of giving older adults a false positive** (that is, incorrectly rating a person as depressed when they are not).[368] To get more reliable results, you should give the full PHQ-9. If you give the PHQ-2, be sure to give the full PHQ-9 to older adults who have a total score of 3 or higher.[369]

Scoring: The total score for the PHQ-9 is derived by first summing each column (e.g., each item chosen in column "More than half the days" = 2), then summing the column totals. Total scores range from 0 to 27 and indicate the following levels of depression severity:

0–4: None-minimal
5–9: Mild depression
10–14: Moderate depression
15–19: Moderately severe depression
20–27: Severe depression

In addition to the total score, review responses to Question #9 (suicidality) and the unnumbered question below it (the effect of symptoms on the client's daily functioning) when determining whether to initiate or refer for further assessment and treatment.[370,371,372]

Screening for Anxiety

About 10 to 11 percent of older adults have had an anxiety disorder in the past year.[373,374] About 15 percent have had an anxiety disorder in their lifetime.[375] Older women may be especially at risk for anxiety. The number of women ages 55 and older with any anxiety disorder in the past year has been estimated to be almost double that of older men (about 14 percent versus nearly 8 percent).[376]

Anxiety is underdiagnosed in the older adult population.[377] Providers may view older clients' worries and concerns as a normal part of aging.[378] Older adults' symptoms of anxiety can also be mistaken for physical conditions common in older age, as well as depression.[379]

Yet different types of anxiety disorders can and do occur in older people. Some of these include:

- **Generalized anxiety disorder (GAD), panic disorder, and social phobia.**[380] In the National Comorbidity Survey Replication, the 12-month prevalence of GAD in people ages 65 and older was 1.2 percent.[381] In the same study, 0.7 percent of adults ages 65 and older had past-year panic disorder, and 2.7 percent had past-year social phobia.
- **PTSD.** Estimates of past-year PTSD prevalence for those 65 or older range from 0.4 percent to 2.6 percent.[382,383]

Symptoms of anxiety that are present but do not meet full criteria for an anxiety disorder are more common than full anxiety disorders. **As many as half, or possibly slightly more, of older adults in the community and in treatment settings may have anxiety symptoms.**[384]

It is not unusual for older people with anxiety to misuse substances, especially alcohol and tobacco:

- In the National Epidemiologic Survey on Alcohol and Related Conditions, adults 65 and older with any anxiety disorder in their lifetime had a 1.5 times greater chance of having a lifetime AUD, when compared with adults 65 and older without anxiety disorders.[385] They also had a 1.6 times greater chance of having a lifetime tobacco use disorder.[386]
- Among older people assessed for treatment for alcohol misuse,[387] the most commonly reported reason for using alcohol among women (24 percent) was "to reduce tension or anxiety." This was also the second-most-common reason reported by men (20 percent).
- Adults ages 55 and older with GAD in the past year were 2.2 times more likely to have had an SUD in the past year.[388] Adults ages 50 to 64 who had an anxiety disorder in the past year were 1.7 times more likely to have smoked cigarettes in the past year.[389]

A review of anxiety assessment tools created for or approved for use with older people[390] found the PSWQ and the Geriatric Mental Status Examination are useful and strongly supported by scientific evidence. The Geriatric Mental Status Examination is a somewhat lengthy semistructured interview, not a brief screening tool. For that reason, it is not included here. **Another valid and reliable self-report anxiety scale designed specifically for older people is the GAS** (Exhibit 3.5).[391] The original GAS has 30 items. A short form of only 10 items was developed and, like the full measure, was found to be valid for use in older people.[392]

Higher scores on the GAS indicate higher anxiety. More research in larger clinical samples is needed to determine the optimal cutoff score, although in the 30-item scale, a cutoff of 16 may be clinically useful.[393]

EXHIBIT 3.5. Geriatric Anxiety Scale (GAS)

Below is a list of common symptoms of anxiety or stress. Please read each item in the list carefully. Indicate how often you have experienced each symptom during the **PAST WEEK, INCLUDING TODAY,** by checking under the corresponding answer.

	Not at all (0)	Sometimes (1)	Most of the time (2)	All of the time (3)
1. My heart raced or beat strongly.				
2. My breath was short.				
3. I had an upset stomach.				
4. I felt like things were not real or like I was outside of myself.				
5. I felt like I was losing control.				
6. I was afraid of being judged by others.				
7. I was afraid of being humiliated or embarrassed.				
8. I had difficulty falling asleep.				
9. I had difficulty staying asleep.				
10. I was irritable.				
11. I had outbursts of anger.				
12. I had difficulty concentrating.				
13. I was easily startled or upset.				
14. I was less interested in doing something I typically enjoy.				
15. I felt detached or isolated from others.				
16. I felt like I was in a daze.				
17. I had a hard time sitting still.				
18. I worried too much.				
19. I could not control my worry.				
20. I felt restless, keyed up, or on edge.				
21. I felt tired.				
22. My muscles were tense.				
23. I had back pain, neck pain, or muscle cramps.				
24. I felt like I had no control over my life.				

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	Not at all (0)	Sometimes (1)	Most of the time (2)	All of the time (3)
25. I felt like something terrible was going to happen to me.				
26. I was concerned about my finances.				
27. I was concerned about my health.				
28. I was concerned about my children.				
29. I was afraid of dying.				
30. I was afraid of becoming a burden to my family or children.				

GAS Scoring Instructions

Items 1 through 25 are scorable items. Each item ranges from 0 to 3. Each item loads on only one scale. Items 26 through 30 are used to help clinicians identify areas of concern for the respondent. They are not used to calculate the total score of the GAS or any subscale.

Total Score = sum of items 1 through 25.
Somatic subscale (9 items) = sum of items 1, 2, 3, 8, 9, 17, 21, 22, 23
Cognitive subscale (8 items) = sum of items 4, 5, 12, 16, 18, 19, 24, 25
Affective subscale (8 items) = sum of items 6, 7, 10, 11, 13, 14, 15, 20

The PSWQ[395] is a self-report instrument with 16 items, each rated on a 5-point scale. Items 1, 3, 8, 10, and 11 are reverse scored as follows:

- Very typical of me = 1 (circled 5 on the sheet)
- Circled 4 on the sheet = 2
- Circled 3 on the sheet = 3
- Circled 2 on the sheet = 4
- Not at all typical of me = 5 (circled 1 on the sheet)

The remaining items are scored regularly. The item scores are added to produce a total score ranging from 16 to 80, with higher scores reflecting more worry. **A score of 50 or higher by an older person could mean significant worries are present,** but research on cutoff scores in older people is too limited to know for certain.[396] Do not assume that an older client who scores below 50 does not have anxiety. The PSWQ is available in the Chapter 3 Appendix.

Screening for PTSD, Trauma Symptoms, and Abuse

People with PTSD are at high risk for substance misuse.[397] People with PTSD may use substances to help themselves cope and feel better. Even if a person does not meet criteria for PTSD, experiencing a traumatic event at any point in one's life raises the risk for substance misuse.[398,399] As with any other clients, explore whether older clients have a history of trauma.

About 52 percent of people 50 and older have had at least one adverse childhood experience,[400] such as sexual abuse, physical abuse, neglect, or extremely stressful family events including:

- Seeing the abuse of a family member.
- Living in the home with someone who misuses substances or has a mental disorder.
- Experiencing the death of a parent or abandonment by one's parents.

- Having a household member in the criminal justice system.

PTSD in older adults is not very common. Past-year PTSD occurs in only about 0.4 percent to 2.6 percent of people ages 65 and older.[401,402] Many people with trauma do not meet criteria for PTSD but do meet criteria for depression.[403] **Thus, depression screening is important in older clients who misuse substances.**

Trauma in older clients can include being a current victim of elder abuse. According to CDC, 1 in 10 adults (ages 60 or older) who live at home is a victim of elder abuse each year.[404] Elder abuse can manifest as emotional (or mental) abuse, financial abuse (or exploitation), physical abuse, sexual abuse, and neglect.[405] Of women over age 65, 20 to 30 percent have been victims of intimate partner violence.[406] Older adults who experience abuse are more likely to:[407]

- Have depression or anxiety.
- Have thoughts of suicide.
- Attempt suicide.
- Need emergency department care.
- Be hospitalized.
- Die prematurely.

Some research shows that older adults from minority ethnic or racial groups may be more likely to experience abuse.[408] The most recent nationally representative study of elder abuse found that lack of social support is a primary risk factor for experiencing elder abuse and for having negative outcomes following such abuse.[409] Cognitive disorders are a major risk factor for experiencing abuse. Older adults with dementia are almost five times more likely to be victims of abuse as older people without dementia.[410]

Ask all older clients with ongoing or past substance misuse about their history of trauma, including trauma in childhood and current trauma. Be sure to ask about any current abuse, including intimate partner abuse. Use brief screening measures to further explore these areas. Screening for trauma and abuse in older clients is important, as older adults with PTSD may have different or milder symptoms than younger clients. PTSD can thus be harder to recognize in older people.[411]

Trauma is a sensitive topic for many clients. You need to know not just what to ask but how to ask it. Otherwise, clients might "shut down" or feel uncomfortable sharing private details with you. Some tips to help you assess trauma fully but in a gentle, sensitive manner include the following:[412]

- **Remind the client you are there as a support.** Explain what will take place during and after the screening and assessment so that the individual knows what to expect.
- **Use screening and assessment tools that have been well researched and approved for use with older adults.**
- **Remember that trauma can come in many forms.** Use a checklist or question list to make sure you cover all possible traumas and not just ones that are commonly thought of (like physical and sexual abuse). You can find more information about Adverse Childhood Experiences (ACEs) on the CDC's website (www.cdc.gov/violenceprevention/childabuseandneglect/acestudy/index.html).
- **Tell clients that they can answer whichever questions they wish, however they wish.** If they choose to only partly answer a question, that's okay. If they choose not to answer a question at all, that's also fine.
- **Remind them that they are safe.** Sometimes talking about a trauma can feel scary, as if the traumatic event is happening again. You don't want clients to feel that talking about their trauma is dangerous. This could lead them to avoid talking about it altogether, and that is not helpful.
- **Do not ask clients to "relive" their trauma by describing it in detail.** Let your clients answer questions about their trauma in the ways that are most comfortable to them. There's no "right or wrong way" for them to talk about their experiences.
- **Ask how the client's trauma symptoms affect functioning.** This includes ability to complete daily activities, engage in self-care, and maintain intimate relationships and a healthy social life.
- Screen clients with histories of trauma for CODs and suicide risk.
- Some people naturally feel more comfortable sharing information in writing than verbally.

Have paper-and-pencil or computerized self-report trauma measures on hand for clients who would rather not take part in a clinical interview.

- **Share resources and information with clients** as needed to keep them safe and feeling supported.
- **End positively.** After assessment, ensure that the client feels safe and ready to leave the session.

PTSD Checklist for DSM-5

The PTSD Checklist for DSM-5 (PCL-5; Exhibit 3.6) is an updated version of the widely used and researched PTSD Checklist (PCL), which was based on DSM-IV criteria. Not much research has yet been conducted on the use of the PCL-5 with older adults. The PCL-5 has been used to screen for PTSD in some studies of older veterans,[413,414,415] but these studies were not designed to look at the validity of the PCL-5 in aging populations. More research is needed in this area.

The optimal PCL-5 cutoff score in older adults is unclear. One study of Vietnam veterans (thus, mostly older men) found a PCL-5 score of 37 made the best cutoff for PTSD screening.[416] The Department of Veterans Affairs (VA) instructions on the PCL-5 (www.ptsd.va.gov/professional/assessment/adult-sr/ptsd-checklist.asp) note a cutoff score of 33 as "reasonable" to use until further research is published on the best cutoff scores in different groups of people (such as veterans versus civilians).[417] The VA warns that cutoff scores from the original PCL and those for the PCL-5 are neither equal nor interchangeable given that the PCL-5 contains changes in rating scales and number of items. **You should not use PCL cutoff scores when interpreting scores from the PCL-5.**

EXHIBIT 3.6. PTSD Checklist for DSM-5 (PCL-5)

Instructions: Below is a list of problems that people sometimes have in response to a very stressful experience. Please read each problem carefully and then circle one of the numbers to the right to indicate how much you have been bothered by that problem **in the past month**.

In the past month, how much were you bothered by:	Not at all	A little bit	Moderately	Quite a bit	Extremely
1. Repeated, disturbing, and unwanted memories of the stressful experience?	0	1	2	3	4
2. Repeated, disturbing dreams of the stressful experience?	0	1	2	3	4
3. Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)?	0	1	2	3	4
4. Feeling very upset when something reminded you of the stressful experience?	0	1	2	3	4
5. Having strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating)?	0	1	2	3	4

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In the past month, how much were you bothered by:	Not at all	A little bit	Moderately	Quite a bit	Extremely
6. Avoiding memories, thoughts, or feelings related to the stressful experience?	0	1	2	3	4
7. Avoiding external reminders of the stressful experience (for example, people, places, conversations, activities, objects, or situations)?	0	1	2	3	4
8. Trouble remembering important parts of the stressful experience?	0	1	2	3	4
9. Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as: I am bad, there is something seriously wrong with me, no one can be trusted, the world is completely dangerous)?	0	1	2	3	4
10. Blaming yourself or someone else for the stressful experience or what happened after it?	0	1	2	3	4
11. Having strong negative feelings such as fear, horror, anger, guilt, or shame?	0	1	2	3	4
12. Loss of interest in activities that you used to enjoy?	0	1	2	3	4
13. Feeling distant or cut off from other people?	0	1	2	3	4
14. Trouble experiencing positive feelings (for example, being unable to feel happiness or have loving feelings for people close to you)?	0	1	2	3	4
15. Irritable behavior, angry outbursts, or acting aggressively?	0	1	2	3	4

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In the past month, how much were you bothered by:	Not at all	A little bit	Moderately	Quite a bit	Extremely
16. Taking too many risks or doing things that could cause you harm?	0	1	2	3	4
17. Being "superalert" or watchful or on guard?	0	1	2	3	4
18. Feeling jumpy or easily startled?	0	1	2	3	4
19. Having difficulty concentrating?	0	1	2	3	4
20. Trouble falling or staying asleep?	0	1	2	3	4

Reprinted from material in the public domain.[418] A digital, fillable form is available online (www.ptsd.va.gov/professional/assessment/documents/PCL5_Standard_form.PDF).

Primary Care PTSD Screen for DSM-5

The Primary Care PTSD Screen for DSM-5[419] (PC-PTSD-5) is a five-item questionnaire that identifies clients likely to have PTSD. It was approved for use in a sample of older veterans (mostly male; mean age 63 years).[420] All questions are yes/no. A score of 3 or more "yes" responses is considered positive.[421] More information on using this tool is available online (www.ptsd.va.gov/professional/assessment/documents/pc-ptsd5-screen.pdf). The PC-PTSD-5 is available in the Chapter 3 Appendix.

Elder Abuse Suspicion Index©

The Elder Abuse Suspicion Index©[422] is a six-item yes/no questionnaire. You should ask the client Questions 1 through 5. You can answer Question 6 yourself. Questions apply to the last 12 months. A "yes" response on one or more questions (other than on Question 1) is considered a positive screen. This measure appears in the Chapter 3 Appendix.

Screening for Co-Occurring Cognitive Disorders

You should also screen older clients who misuse substances for cognitive impairment, which includes dementia and mild cognitive impairment (MCI). **Dementia** is a brain disorder affecting mental ability and personality that gets worse over time. Several types of dementia exist, such as Alzheimer's (the most common form) and Parkinson's dementia. People with dementia have difficulties in at least one area of thinking, such as memory, learning, language, or attention. These difficulties make it hard for people to live their everyday lives without help from others (e.g., needing help getting dressed, bathing, feeding themselves, or managing their money). Current research suggests almost 9 percent of Americans ages 65 and older have dementia.[423] That includes over 3 percent of people ages 65 to 74, roughly 10.5 percent of people ages 75 to 84, and almost 30 percent of people ages 85 and older.[424]

MCI is a milder form of cognitive impairment that often represents early brain changes that may precede and lead to dementia. In MCI, deficits in thinking from a previous level of performance are present but are not severe enough for a person to need help from others in their everyday life. A person with MCI is at increased risk of developing Alzheimer's or another type of dementia. About 10 percent to 20 percent of adults in the United States ages 65 and older have MCI, with the likelihood increasing with age.[425,426,427] (Chapter 6 of this TIP provides more information about cognitive disorders and older adults who misuse substances.)

Substance misuse, especially heavy alcohol use, can negatively affect thinking. Keep in mind that:

- Heavy alcohol use can harm the brain, heart, liver, and other organs.[428,429]
- Alcohol's negative effects on the brain can lead to memory problems, difficulty learning new information, and difficulty thinking quickly.[430,431,432]
- Heavy alcohol use can also cause brain cells and tissues to shrink or no longer work properly.[433]
- In some people, even moderate alcohol use can harm the brain.[434]
- Heavy drinking may do more harm to older adults' cognitive abilities than those of younger adults.[435]

Less research has been done on how substances other than alcohol can affect one's chances of having a cognitive disorder like dementia or MCI. However, **the long-term use of benzodiazepines,[436,437,438] cannabis,[439,440,441] cocaine,[442] and tobacco does seem to carry a somewhat greater risk of cognitive problems.[443]**

Mini-Cog©

The Mini-Cog© is a brief screening tool that was created to detect dementia in older adults. It takes about 3 minutes to complete and involves a verbal memory task and a clock drawing task. The Alzheimer's Association endorses using the Mini-Cog© in primary care settings to screen for cognitive impairment, and the National Institute on Aging lists it as an instrument to consider using for this purpose.[444,445] Several reviews have found the Mini-Cog© to have acceptable-to-good test characteristics (e.g., sensitivity, specificity, negative predictive value), although research suggests that it is better at detecting dementia than MCI.[446,447,448]

The Mini-Cog© and its administration and scoring instructions are freely available to individual clinicians at https://mini-cog.com/mini-cog-instrument/standardized-mini-cog-instrument. Two brief screening tools for cognitive impairment that have been more widely administered—the Montreal Cognitive Assessment (which was created to screen for MCI) and the Mini-Mental State Examination—now have costs associated with their use.[449,450]

Communicating Screening Results

Knowing what to do after screening is as important as knowing why and how to screen in the first place. Whether negative or positive, you should **inform all clients of their screening results.** Read further to learn the specific steps to take next, which will differ based on the client's screening results.

Negative Results

No formal intervention is needed for people who screen negative. Instead:

- **Acknowledge clients who are substance free.** ("I see that it's important to you not to smoke.")
- **Offer positive comments about the benefits of drug- and alcohol-free living.** ("You know, people who don't smoke generally live longer, healthier lives than people who do.")
- **Reinforce attitudes, behaviors, and strategies that promote health.** Think about asking whether their lack of substance use is new or lifelong, or whether it is because they are in recovery. ("Not drinking is a healthy decision. What made you decide not to drink?")

For older adults who screen negative or at low risk for substance misuse, be sure to:

- Use positive language to urge them to continue using substances appropriately.
- Give brief education, such as reminding them of low-risk alcohol intake levels for older adults.
- Continue monitoring them for future signs and symptoms of possible at-risk substance use.

Even if a screener is negative, the TIP consensus panel recommends that you occasionally rescreen clients. Why is that necessary? Because substance use can change over an individual's lifetime. Substance use patterns can also change with life events, cognitive functioning, and mental health status.

No clear scientific data indicate exactly how often you should rescreen clients. The TIP consensus panel recommends that you use your clinical judgment to determine how often to rescreen. You might consider screening more often (at least once a year) if the client has repeatedly requested prescription drugs or has certain conditions, such as:

- Physical conditions that are often alcohol or drug related (e.g., high blood pressure, insomnia).
- Diabetes or ulcers unresponsive to treatment.
- Staph infection on face, arms, or legs.
- Repeated fractures, lacerations, or burns.
- Depression.
- Unexplained weight loss.
- Frequent falls.
- Repeated trauma suggesting domestic violence.
- Sexually transmitted diseases.

When doing an SUD screen, if the depression screener is negative but the client has some symptoms of depression, you will want to give another depression screen in 1 month. Symptoms to look for include low mood, difficulty making decisions, loss of interest in pleasurable activities, and feelings of hopelessness. You should continue to monitor the client's symptoms over time. You may want to give another depression screen earlier if the client reports worsening symptoms or if the client seems to be feeling worse. **If the depression screen is negative and the client has few or no symptoms of depression, you can continue screening on a yearly basis.** If the client reports new symptoms or you suspect the person may be feeling depressed at any time, you should give a depression screener again.

When doing an SUD screen, if trauma or elder abuse screeners are negative, continue with routine clinical care. Rescreen any time you suspect that trauma or abuse has occurred. For instance, if a client reports disagreements with her husband and has visible bruises, screen for possible abuse.

You can also give a substance-related, depression, or trauma screener again if the client experiences major changes that could lead to substance misuse, depression, anxiety, or PTSD. Such changes include the death of someone significant to the client, a transition to an assisted living residence or nursing home, or retirement.

Positive Results

For clients who screen positive for potential substance misuse, three possible approaches exist. These are based on the severity of the problem and possible risk of having substance misuse. (None of the three approaches listed below is appropriate for an intoxicated client, who may need an immediate and specific response [e.g., referral to detoxification].) The three approaches are:

- **Immediately give a brief assessment** during the same visit in which you gave the screening measure. (See the section "Conducting Brief Assessments and Interventions" below.)
- **Give a full assessment** if the screening results are unclear. You may need to schedule another visit for this longer assessment.
- **Refer the client to another provider for assessment.** Refer high-risk clients to a program where specialized SUD treatment services are available, if possible.

If a cognitive screener is positive, you should refer the client for further testing by a behavioral health service provider with special training in diagnosing clients with dementia and MCI. Making such diagnoses requires additional, indepth cognitive testing. Do not give a diagnosis of dementia or MCI based solely on a positive cognitive screen.

If a depression, anxiety, PTSD, or trauma screener is positive, give a full assessment using DSM-5 diagnostic criteria to determine whether a disorder is present (or refer the client for further evaluation if you do not have the training and credentials to make a mental disorder diagnosis).

This may mean giving a full diagnostic interview, perhaps at another appointment. Even if full diagnostic criteria are not met, the client may still benefit from treatment if symptoms are upsetting or interfere with daily living.

If an elder abuse screener is positive, follow your state's laws on reporting suspected abuse. Unless you work in private practice, you first need to contact your immediate supervisor to ensure that you are following program procedures and abiding by state laws. You may need to consult with social services or Adult Protective Services on next steps. The Department of Justice provides a list of online resources to help you learn your state's laws about reporting abuse and involving Adult Protective Services (www.justice.gov/elderjustice/elder-justice-statutes-0). The National Center on Elder Abuse links to state-specific reporting numbers and other agencies (https://ncea.acl.gov/Resources/State.aspx). Make sure you are familiar with these laws and resources before giving abuse screeners so that you can act right away if a screener is positive.

Present the results of positive screens to clients in a gentle manner. For example, you might say, "After reviewing your answers on the screening questionnaire, there are some things I'd like to follow up on with you," or, "Your answers are similar to the answers of people who may be having a problem with alcohol."

Conducting Brief Assessments and Interventions

Positive screens for substance misuse require follow-up, but next steps may not be immediately clear. Decisions about follow-up care depend on how much time and effort you can expend, how much training and experience you have in drug and alcohol counseling, and your program's treatment abilities. Also essential are the client's agreement, engagement level, and preferences.

Starting Off on the Right Foot

A successful assessment starts by creating a welcoming environment. This is key to helping older clients "open up" and feel safe talking about substance misuse. You can do this by keeping a gentle, respectful, and empathetic attitude. Many clients who misuse substances feel uncomfortable talking about their substance use in medical settings. A friendly, nonjudgmental atmosphere can put clients at ease and help them share information they may find embarrassing, like feeling depressed or being abused.[451] Using motivational interviewing approaches, such as asking open-ended questions, is more helpful than asking basic yes/no questions.[452] (See the Substance Abuse and Mental Health Services Administration's [SAMHSA] update of TIP 35, *Enhancing Motivation for Change in Substance Use Disorder Treatment* [https://store.samhsa.gov/product/TIP-35-Enhancing-Motivation-for-Change-in-Substance-Use-Disorder-Treatment/PEP19-02-01-003]).

> **What is motivational interviewing (MI)?** Per SAMHSA, it is a clinical approach to helping clients make positive changes in their behavior. MI involves techniques like showing concern and empathy, avoiding arguing, and supporting a client's self-efficacy (a person's belief that he or she can successfully make a change).

Keep in mind that almost all clients will have mixed feelings about their substance use. They will find some aspects of it pleasant and beneficial but other aspects difficult, painful, or harmful. You can help clients discover their own reasons for wanting to change by talking about these mixed feelings and pointing out problem areas.

SAMHSA's TIP 34, *Brief Interventions and Brief Therapies for Substance Abuse,* offers more guidance on how to make assessment and interviews successful.[453]

Looking for a simple way to help clients "open up"? Avoid asking yes/no questions. Open-ended questions are more thought-provoking and help clients share their own experiences in a more meaningful way. Start by asking broad questions about a client's health in general, such as:

- "How would you rate your health overall?"
- "Compared with other people your age, how would you say you are doing?"
- "What health problems do you have?"

Next, move into more specific questions about the client's substance misuse. Try asking questions like:

- "What concerns do you have about your alcohol use?"
- "In what ways might your life be different were you not using tobacco?"
- "How has using opioids affected your relationships?"

Questions that can be answered with a simple "yes" or "no" can seem harsh or judgmental. Older clients might already feel ashamed and uncomfortable talking about their substance use. Closed-ended questions could make those feelings even worse and cause clients to "shut down." On the other hand, open-ended questions can help clients become aware of and express their own experiences and motivations related to substance use.

Brief Assessments

If a client's screening results show mild substance misuse, conduct a brief assessment to get more information. Assessment questions should cover:

- The severity of substance use (including what, how often, and how much the client uses).
- The types of problems connected with the client's use.
- The frequency of problems that occur with the client's use.
- Other special physical and mental factors (e.g., whether a mental or physical disorder is present that could be making the person's substance-related symptoms worse).

If the client's responses suggest an SUD diagnosis per DSM-5 criteria, you should conduct or provide a referral for an indepth assessment. However, you can give a brief outpatient therapeutic intervention if:

- Only mild or mild-to-moderate substance misuse is present.
- The client appears to be at risk for harm because of current substance use.
- Co-occurring illnesses or conditions may be made worse by continuing to drink or use drugs.
- The client declines referral for further assessment or treatment.

Brief Interventions: SBIRT

SBIRT is an approach to providing brief interventions after screening, referrals for further assessment, or treatment. SBIRT approaches are focused on getting clients into treatment early. They include:

- **Screening** for possible substance misuse and level of risk.
- **Offering a brief outpatient intervention** to help clients understand the need to change their substance misuse and help them increase their desire to change.
- **Referrals** to SUD treatment programs or mental health services for clients who need more indepth assessment or intervention.

Behavioral health service and healthcare providers can easily **incorporate brief interventions into standard practices.** Brief interventions:

- Give you the chance to:
  - Explain screening results to clients.
  - Provide information about low-risk substance use.
  - Give advice about changing substance misuse habits.
  - Assess clients' desire for change.
  - Work with clients to set goals and strategies for change.
  - Figure out how best to make sure clients are sticking with their treatment plan.

- Are usually only 10 to 15 minutes long and include a limited number of sessions.
- May require at least one follow-up visit. However, even more follow-up sessions may be needed depending on the setting, the severity of the substance misuse, and clients' responses.
- Are usually inexpensive and quick to conduct.

Most older adults at risk for substance misuse do not need formal specialized SUD treatment. However, many clients can benefit from education to prevent problems before they occur. They can also benefit from SBIRT techniques. For instance, SBIRT that involves basic education as an intervention has been shown to help reduce older adults' risky alcohol use.[454,455] Educate clients on risky alcohol use as a prevention measure and an intervention. Boston University School of Public Health provides helpful information and resources (e.g., demonstration videos) on screening and brief intervention techniques successfully used in primary care and emergency department settings (www.bu.edu/bniart/sbirt-in-health-care/sbirt-brief-negotiated-interview-bni/).

Why do your clients want to change their substance misuse? Knowing the answer to this question is more useful than just knowing whether clients are ready to change. Helping clients explore their reasons for wanting to change their substance use can help them feel more positive and confident about making this change. It also helps better support them during assessment and treatment. It is okay if the reasons for change are initially attributable to outside forces rather than the clients' own desires. Clients pressured into treatment—such as through parole and probation or drug courts—are as or sometimes more likely to succeed in treatment as clients who enter on their own.[456]

SBIRT services must meet the special age-related needs of older adults to give them the greatest chance for success (Exhibit 3.7). You can make your SBIRT services age sensitive by:

- **Using supportive language** in your discussions so that older clients do not feel shame or fear.
- **Using clear, basic terms** with older clients rather than confusing terms or medical language.
- **Sharing information that is specific to older clients,** such as guidelines about low-risk levels of substance use for older adults or physical effects of substance misuse.
- **Including strategies and materials that are culturally sensitive** to clients and to the unique issues that older adults face. For example, your older adult clients may be:
  - Worrying about not being able to live independently, without help from others.
  - Coping with grief (over loss of a partner, spouse, child, or another significant person).
  - Adapting to major life changes, like retiring or moving into an assisted living residence.
- **Thinking about the role of chronic physical conditions in older clients' misuse of substances** (e.g., use of substances to manage chronic pain). Such conditions can also affect symptoms of substance misuse and treatment response.
- **Using tailored screening and assessment measures** that were made specifically for older adults or are approved for use with them.
- **Giving interventions that meet older clients' needs.** For instance, if possible, in-home treatment is helpful if clients cannot travel to your program.
- **Keeping referral information on hand** about local providers who specialize in addiction treatment and are skilled at working with older adults who misuse substances.

EXHIBIT 3.7. Successfully Applying SBIRT Principles to Older Adults

The Florida Brief Intervention and Treatment for Elders (BRITE) pilot project[457] was funded by the Center for Substance Abuse Treatment and modeled on SBIRT. In this program, older adults who screened as needing a brief SUD intervention received:

- **Education** to help reduce substance misuse, develop healthier habits, and improve quality of life.
- **MI** to increase their desire to change substance misuse-related behaviors.
- **Age-appropriate information** designed to address high-risk situations, coping with urges to use substances, and preventing return to substance misuse.

Results from the program were positive.[458] Specific outcomes included the following:[459]

- Clients who completed the program had lower SMAST-G scores.
- At the end of the study, nearly 30 percent of clients in the BRITE program had fewer flags in their medical chart for prescription medication misuse.
- People in the BRITE program had large decreases in depression (measured by the GDS) and suicide risk scores.
- The number of older adults getting treatment in the program was three times greater than the number who were getting SUD services before BRITE began.

RESOURCE ALERT: DESIGNING AND IMPLEMENTING SBIRT PROGRAMS FOR OLDER ADULTS

SAMHSA's *A Guide to Preventing Older Adult Alcohol and Psychoactive Medication Misuse/Abuse: Screening and Brief Interventions* is a manual to assist addiction treatment providers and administrators in designing, implementing, and delivering screening and brief intervention programs to prevent substance misuse in older adults. It is available online (www.ncoa.org/wp-content/uploads/SBIRT-Older-Adult-Manual-Final.pdf). SAMHSA has other resources to help you integrate SBIRT into your program (www.samhsa.gov/sbirt/resources).

The National Council on Aging also offers an instruction manual and workbook for effective screening and brief intervention strategies for risky alcohol use in older adults (www.ncoa.org/wp-content/uploads/BI_OlderAdults_ImplementationManual.pdf).

Conducting Full Assessments for Substance Misuse

Conduct a full assessment for any client whose screening suggests moderate-to-severe substance misuse. Full assessments gather not just substance-related information, but information about overall functioning and health (Exhibit 3.8). This information will help you differentiate among substance misuse, CODs, physical conditions common in older populations, and symptoms of normal aging. Common physical conditions and symptoms of normal aging that can be confused for substance misuse include low energy, memory changes, sleep problems, and decreased appetite.

EXHIBIT 3.8. Key Objectives of a Full Assessment for Substance Misuse

Key objectives of giving a full assessment for substance misuse can include:

- Getting older clients' substance use history (including prescription and OTC medications).
- Checking clients for CODs that can affect substance misuse, such as depression, anxiety, and PTSD.
- Checking clients for other trauma or abuse.
- Learning older clients' physical conditions and physical and medication history. This is especially important for physical conditions that can lead to or result from substance misuse, like sleep problems and pain.
- Asking about social supports available to older clients who misuse substances.
- Referring clients with cognitive problems for a full cognitive assessment by a neuropsychologist or neuropsychiatrist to see whether dementia, MCI, or delirium is present.
- Understanding clients' unique substance misuse. This means asking them about:
  - When and with whom they misuse substances.
  - Why they misuse substances.
  - How misusing substances fits into their life.
  - How they feel and what they believe about their misuse of substances.

Full assessments often involve several members of the care team, depending on the setting and available resources of your program. Which care team members contribute to the full assessment depends on the qualifications and level of expertise needed to address the client's problems. For instance, the assessment may start with a certified drug and alcohol counselor or other licensed provider taking a complete psychosocial history. Other licensed providers may need to complete a psychological evaluation (e.g., if the intake interview is given by someone not licensed to diagnose mental disorders) and look for withdrawal indicators or educate the client on the need for medical withdrawal. A medical staff member may take a medical history and perform a physical exam. Nurses or occupational therapists, rather than behavioral health service providers, usually give assessments of ADLs and fall risk. If your program does not have any medical staff members, you should refer clients elsewhere for this part of the assessment. A physician, nurse, or pharmacist may be consulted to determine risk for medication misuse, whether accidental or intentional.

Determining risk for medication misuse involves reviewing the client's:

- Current prescriptions and OTC medications.
- Management of these medications.
- Ability to obtain prescriptions (referring to cost as well as accessibility).
- Potential adverse reactions to medications.

Full assessments help the treatment team:

- **Make the right diagnosis** (whether it be an SUD, a mental disorder, or a cognitive disorder).
- **Learn the severity** of the substance misuse.
- **Guide treatment planning,** including giving clients the right level of care in the right setting.
- Decide whether medical conditions are present that need to be addressed during treatment.
- Decide whether other conditions are present that need to be addressed during treatment.

The Assessment Process

A complete assessment has several parts. These include:

- Full mental health, medical, family, vocational, social, sexual, financial, legal, substance use, and SUD treatment histories.
- A health history and physical exam for common co-occurring physical conditions that affect mental health as well as physical conditions that suggest the client has substance misuse (e.g., sleep problems, chronic pain). This part of the assessment also sometimes includes biological screening measures, like urine screens (for benzodiazepines and opiates), breath alcohol testing (i.e., breathalyzer), and laboratory tests. Medical professionals should also check

the Prescription Drug Monitoring Program for additional information about clients' prescribed medications.

- Further assessment for CODs. Sometimes referral to an outside provider (e.g., licensed psychologist, clinical social worker) is needed, depending on the expertise of the staff members in your program.
- Assessment of skills used in everyday living, like dressing, bathing, shopping, and managing money.
- Assessment of the client's fall risk. (For example, see the CDC's fall prevention program, "Stopping Elderly Accidents, Deaths, and Injuries," at www.cdc.gov/steadi/.)
- Assessment of the client's basic needs (e.g., housing, nutrition), support network, and strengths/resources.

The most important parts of your full assessment are gathering information about the client's substance use, mental health, physical health, and SUD treatment histories, as well as a listing of prescribed and OTC medications. It may take multiple visits to complete the assessment. Clients will feel safe sharing detailed information as their trust in you builds.

The following sections describe some of the most common parts of a full assessment, targeting only those parts that are most appropriate for older clients who misuse substances. The sections do not cover questions about a client's recreational, military, occupational, or avocational/retirement history.

The section on health history and the physical exam discusses disordered sleep and pain because these are common physical conditions seen in older people who misuse substances. But other health and physical assessments may be needed beyond what is listed in that section.

Make sure you have the required training and qualifications before assessing for or diagnosing SUDs. If no providers in your program have the necessary licenses and qualifications to assess for and diagnose mental disorders, make referrals as necessary to providers who can do so.

Health History and Physical Exam

Taking a complete physical history of clients is very important. Asking about clients' physical history can help you learn about:

- **The medical effects of their substance use** (e.g., soft tissue infection, hepatitis B or C, HIV infection) that may need treatment.
- **Consequences of substance misuse** that might get clients to change (e.g., elevated blood pressure, worsening acid reflux symptoms, increased risk of falls).
- **Physical health issues** (e.g., severe liver disease) that affect whether medications can be given for certain SUDs, such as opioid use disorder.
- Possible drug–drug interactions.

Sleep problems

Sleep quality is closely linked to substance misuse in adults in general. For instance:

- Alcohol misuse and withdrawal can lead to many types of sleep problems. These include:[460,461]
  - Increased awakening during the night.
  - Insomnia.
  - Excessive daytime sleepiness.
  - Less total sleep time.
  - Worsening of sleep apnea and other breathing-related sleep conditions.
- Adults ages 50 and older who binge drink are at an increased risk of insomnia compared with adults in this age group who do not binge drink.[462]
- Compared with people who have never smoked cigarettes, people who smoke report having worse sleep quality, taking longer to fall asleep, sleeping less than 6 hours, and having disturbed sleep.[463]
- Cocaine use is linked to taking longer to fall asleep and having decreased total sleep time.[464]
- Chronic opioid use is associated with an increased risk of central sleep apnea and other breathing-related sleep problems.[465]

RESOURCE ALERT: SAMHSA GUIDANCE ON TREATING SLEEP DISORDERS IN CLIENTS WITH SUDS

SAMHSA's *Treating Sleep Problems of People in Recovery From Substance Use Disorders* offers tips on how to manage clients who have SUDs and sleep problems.[466] It is available online (https://store.samhsa.gov/product/Treating-Sleep-Problems-of-People-in-Recovery-From-Substance-Use-Disorders/sma14-4859).

Sleep is an important part of clients' physical history. Sleeping less and waking earlier are normal parts of aging. But it is abnormal for older clients to be very tired in the day or not sleep through the night. These problems can increase risk of negative events like falls and even death.[467,468,469]

If symptoms of poor sleep are present, also ask about the client's:[470]

- Sleep history.
- Leg movements during sleep.
- Grief or recent loss.
- Level of physical activity during the day.
- Caffeine intake.
- Alcohol consumption.
- Need to use the bathroom during the night.

Several medication and nonmedication treatments can improve sleep problems. Depending on symptom severity, the medical provider conducting this part of the assessment may consult with a sleep medicine specialist for an indepth assessment or with a psychologist for behavioral management of symptoms. A full assessment of sleep should include an assessment for sleep apnea, which may involve an in-home or in-clinic overnight sleep study. Sleep problems that result from a physical condition or medication can usually be treated by addressing the medical illness and by switching medication or adjusting the dose.

Chronic pain

Chronic pain can be hard to manage in any client. But in clients who misuse or are at risk of misusing substances, managing chronic pain becomes even more difficult. This is because substance use can often affect chronic pain in positive ways, even though the substance itself is harmful. For example, many older clients start taking pain medication to reduce physical discomfort. However, they may continue taking the medication to also manage emotional pain or to reduce withdrawal symptoms that occur when they try to stop taking it. Clients may misuse both prescribed and nonprescribed substances, such as alcohol, for such reasons.

People with chronic pain may be at risk for substance misuse. This is not surprising given that substances like opioids, alcohol, and cannabis can help reduce physical pain. The following are findings from several studies of older adults:

- In Wave 3 of the National Epidemiologic Survey on Alcohol and Related Conditions, adults ages 50 and older who engaged in nonmedical cannabis use were significantly more likely also to report past-year injuries, greater pain interference, and nonmedical pain reliever use compared with those not using cannabis.[471] The study authors suggest that, in some older adults, nonmedical substance use and misuse may reflect their efforts to reduce pain without help from doctors.
- Having numerous painful medical conditions, or more severe pain, was associated with a 15-percent to 20-percent increased chance of having physical, mental, or social problems related to drinking.[472] Older adults with pain severe enough to interfere with ADLs were especially likely to have alcohol-related problems.[473]
- Using alcohol to self-medicate pain is associated with greater pain intensity, greater pain interference with everyday activities, and higher levels of depression and anxiety compared with not using alcohol to self-medicate pain.[474]

Older clients are likely to underreport their pain.[475] Using a two-step approach will help you thoroughly assess for chronic pain in older clients:

- **First, ask your clients directly about their pain.**
  - Self-report is the most reliable method of assessing pain in older people.[476] Even most clients with mild-to-moderate cognitive impairment can accurately tell you about their pain.[477]
  - Open-ended questions ("Tell me about your aches and sores," or "Tell me about any discomfort you are having") may be more useful than yes/no questions ("Are you feeling any pain?").[478]
  - You should try using words other than "pain," because some older adults will not report feeling pain.[479] Instead, you can use words like "discomfort," "aches," "hurt," and "sore."
- **Second, use a pain rating scale to learn the intensity of your client's pain.**
  - The revised Iowa Pain Thermometer (IPT-R; see the Chapter 3 Appendix) and the revised Faces Pain Scale (see the Chapter 3 Appendix) are approved for use in older adults, including those from diverse racial and ethnic populations.[480] The IPT-R can also be used with older adults with cognitive impairment.[481]
  - Verbal descriptor scales (VDS; Exhibit 3.9) can be used with older adults with and without cognitive impairment.[482] These scales come in two main types.[483] One type asks clients to rate their pain only using words, such as "none," "mild," "moderate," or "extreme." The second type asks clients to rate their pain using a number scale. The number scale usually ranges from 0 to 5 or 0 to 6.

All three of these tools (the IPT-R, the revised Faces Pain Scale, and VDS instruments) are easy to use and easy for older clients to understand. Although pain scales can be useful, do not rely on them alone. Assessment and treatment planning should consider not just how a client rates on a pain scale but also his or her level of functioning in the presence of pain.

EXHIBIT 3.9. Verbal Descriptor Scales (VDS)[484,485]

(Word-based scale) Please describe your pain from "no pain" to "slight," "mild," "moderate," "severe," "extreme," or "pain as bad as it could be."

(Number-based scale) Please describe your pain using these numbers: 0 for no pain, 1 for slight pain, 2 for mild pain, 3 for moderate pain, 4 for severe pain, 5 for extreme pain, and 6 for the most intense pain imaginable.

Older clients with chronic pain can be treated effectively. However, giving older clients prescription opioid medications to treat chronic pain raises concerns. That's because:

- **Little evidence exists that opioids offer long-term relief of chronic noncancer pain in older adults.**[486] Nonopioid medications, like acetaminophen and topical nonsteroidal anti-inflammatory drugs (NSAIDs), can be effective for certain conditions and are alternatives to opioid medications.[487]
- **Compared with younger adults, older adults have a higher risk of harmful drug–drug interactions** because they often take one or more prescribed medications for chronic illnesses. The combination of opioid medications and alcohol is also very dangerous in older people. (See the CDC's factsheet on screening for alcohol use before prescribing opioids at www.cdc.gov/drugoverdose/pdf/prescribing/AlcoholToolFactSheet-508.pdf.)
- **Long-term opioid use can increase the risk for certain negative physical conditions.** These conditions include breathing problems and hormone changes for older adults.[488]
- **This age group is also at risk for opioid misuse and addiction.**[489] In 2018, more than 9,200 opioid overdose deaths occurred among people ages 55 and older.[490] From 2017 to 2018, opioid overdose deaths among people ages 65 and older increased by 14.3 percent, and deaths from prescription opioid overdose among this same age group increased by 7.4 percent.[491]

- **Some nonmedication treatments may be beneficial and carry less risk** of harm to older adults than opioid medications, although more research is needed on these management approaches.[492,493]

Healthcare providers and prescribers must **carefully weigh the possible benefits of opioid treatment with its risks.** For instance, healthcare prescribers should:[494]

- Try using nonmedication treatments in place of or along with opioid treatment.
- Use a "start low and go slow" approach to dosing.
- Check for possible drug–drug interactions with clients' other medications.
- Discuss with clients the benefits and possible harms of taking opioids.
- Screen and assess clients for factors that increase the odds of misuse and addiction.
- Carefully monitor clients for harmful reactions.
- Educate clients about opioid-related safety issues. These include drug–drug interactions, fall risk, driving risks, and safe storage of opioid medications.
- Periodically review the ongoing need for the opioid medication, and consider whether the dose can be reduced, tapered, or discontinued.

Nonmedication and medication treatments are available to help older adults reduce their pain and improve their everyday activities and quality of life while keeping their risk of opioid misuse and addiction low. Nonopioid medication treatments for pain recommended by CDC in its 2016 *CDC Guideline for Prescribing Opioids for Chronic Pain*[495] include:

- Acetaminophen.
- NSAIDs.
- Antidepressants.
- Anticonvulsants.
- Epidural injections.

In some instances, opioid medication may be appropriate and can be used safely if used within CDC guidelines for safe practices.[496] However, proven nonmedication approaches to pain management exist, such as acupuncture, cognitive–behavioral therapy, physical therapy, massage, biofeedback, and chronic pain self-management programs.

Of note, if medication is used, acetaminophen or oral NSAIDs in older adults can increase their risk of hepatic, cardiovascular, or gastrointestinal toxicity, especially when used long term, in excess, or in combination with certain other medications.[497,498]

Psychosocial History

Substance use history

Substance use histories can help you learn the severity of a client's substance misuse, make SUD treatment plans, discover whether potential drug interactions are present, and understand the negative consequences of the substance misuse. Asking about the client's history of substance use will help you learn about the individual's severity of use and effects of that use on life. This may include asking about:

- Choice of substances used.
- Age at first use.
- The person who first introduced the client to the substance.
- Routes of taking the substance (e.g., injection, smoking).
- History of tolerance, withdrawal, mixing drugs, and overdose.
- Reasons for starting and continuing to use the substance, which may change over time.

Be sure to also ask about current patterns of use, which will help you make treatment decisions. Such questions could include:

- "How much do you drink when you do use alcohol?"
- "How often do you smoke or use tobacco?"
- "When was the last time you had a drink?"
- "Have you ever wondered whether your substance use is affecting your life or health in any way? Have you ever had a DUI?"
- "Does drinking alcohol help you feel better? (If yes) In what ways does it help you feel better? How do you feel after you have stopped drinking?"

- "Which prescription and over-the-counter medications do you take? Do any of them interact with alcohol in a way that could harm you?"

SUD treatment history

Clients' history of seeking SUD treatment or stopping use on their own can help guide treatment planning. Also ask clients about what led to their return to substance use after having stopped for a period. Successful and unsuccessful quit attempts can help you make treatment planning decisions. Taking an SUD treatment history could include asking clients about:

- Specific settings in which they were treated (e.g., inpatient versus outpatient, criminal justice versus non-criminal justice).
- Their history of using support groups and community support and in what ways such supports were (or were not) helpful.
- Previous SUD treatments that were and were not successful. In addition, ask about periods following treatment where clients were successful (e.g., what worked for them).
- Previous attempts at stopping use, why they attempted to stop, and how many times they have tried to stop.
- Circumstances that led to the clients' starting treatment. (Was it voluntary? Why start treatment now, today?)
- Relapse prevention and recovery strategies that worked in the past.
- How treatment ended. (Did they complete treatment or leave treatment early? If the latter, why?)

History of mental illness and mental health services

Co-occurring mental illness is very common among people who misuse substances.[499,500] The 2019 National Survey on Drug Use and Health estimates that 49.2 percent of adults with an SUD in the past year also had a mental illness,[501] whereas only about 16.8 percent of adults without an SUD in the past year also had a mental illness.[502] The survey also estimates that 10.7 percent of adults ages 50 and older with any mental illness also have an SUD.[503] Meanwhile, an estimated 36.8 percent of adults ages 50 and older with an SUD have a co-occurring mental disorder.[504]

Depression, anxiety, and PTSD are especially likely to co-occur with substance misuse.[505,506,507,508] Keep the following points in mind when you assess for these conditions:[509]

- Older clients may be more likely to talk about physical symptoms than emotional ones.
- You should ask about any medications the client is taking. Some medications can cause side effects that are similar to symptoms of depression (like trouble sleeping or feeling low energy).
- Depending on the client's cognitive abilities, you may need to speak with a family member or a family caregiver to get information about the client's mental health and history. Be sure to get permission from the client before doing this.
- Older women in particular can be easily mistaken as having depression or other mental disorders (like anxiety) instead of PTSD.[510]
- Remember the importance of helping clients feel safe physically and emotionally.
  - Trauma and abuse can occur at any point in a person's life. Suicide also can occur in older people. Before assessing for depression and PTSD, make sure you have a safety plan in place. This will help you respond appropriately to any client's reports of abuse and self-harm.
  - Keeping your clients safe isn't just the right thing to do—it's the law. Make sure you know your state's laws about responding to reports of abuse and self-harm.

The co-occurrence of a mental disorder and SUD can make treatment difficult and is associated with negative events. In older adults, such events include increased mortality, an increased chance of experiencing harmful medication–substance interactions, the co-occurrence of complex medical conditions (like dementia), and an increased risk of suicide.[511] Be sure to ask clients about psychosocial symptoms they have during periods of substance misuse and abstinence.

Social history

Learning about a client's social environment and relationships can guide you in treatment planning. That is because social factors can affect whether a client stays in treatment or leaves treatment early, as well as treatment outcomes. Valuable information about the social environment includes the client's:

- Transportation.
- Caregiver needs.
- Caregiving responsibilities (e.g., whether the client cares for a child or other dependent).
- Cohabitating status (i.e., living alone versus with someone).
- Regular access to safe, secure, and stable housing.
- Criminal justice involvement.
- Employment status and quality of work setting.
- Relationships with family, friends, or close others who themselves use substances. (Get the client's consent before speaking to any of these people directly.)
- Sexual orientation, identity, and history, including risk factors for HIV and sexually transmitted infections.
- Level of safety at home, especially in terms of potential for violence. Note that substance use greatly increases the risk of intimate partner violence. Screen all women who seek SUD treatment for intimate partner abuse, regardless of their age.[512] Substance use increases the risk of abuse toward older adults,[513] and experiencing elder abuse can contribute to substance misuse among older adults. If you suspect an older adult is misusing substances, screen for elder abuse.

Family history

Family can play a major role in whether a person is at risk for substance misuse. Always ask clients about the substance use histories of their parents, siblings, and partners. Family-related factors that can increase the risk of having substance misuse include:[514,515]

- Genetic factors.
- The home environment in which a person was raised—specifically, whether the client was exposed to substance use in the household during childhood.
- Having a first-degree relative (i.e., a parent, child, sister, or brother) who misuses substances. For instance, a person has five times the risk of developing alcohol dependence if he or she has any first-degree relative with alcohol dependence.[516] The client's misuse may have a basis in genetic factors, modeling of behavior of others, or both.
- Having negative or low-quality parent–child relationships in adolescence that were unsupportive and featured a lot of arguing or fighting.[517]

Activities of Everyday Living

As people age, many sooner or later have problems completing everyday tasks on their own, like bathing, cooking, shopping, and driving. **Substance misuse can make everyday living even more difficult, including ADLs and instrumental activities of daily living (IADLs).** ADLs are basic everyday tasks like dressing, using the toilet, using the phone, and feeding oneself. IADLs are more complex tasks that need more skills to complete. They include balancing a checkbook, shopping, cooking, and driving. **As part of assessing substance misuse, measure clients' ability to complete ADLs and IADLs without help. This will paint a full picture of the effects of substance misuse.**

Katz Index of Independence in Activities of Daily Living

The Katz Index of Independence in Activities of Daily Living (Katz ADL; see the Chapter 3 Appendix)[518] is one of the most commonly used measures of ADLs. It assesses performance in six areas: bathing, dressing, toileting, transferring, continence, and feeding.

Barthel Index

Like the Katz ADL, the Barthel Index is a brief, widely used screener for ADLs.[519,520] It measures a person's ability to perform the following: feeding, bathing, grooming, dressing, toileting, controlling bladder and bowels, transfers, mobility, and using the stairs. Unlike the Katz ADL, the Barthel Index collects information from three sources—clients, their caregivers, and direct observation—to see whether older adults can complete activities without help.

Functional Activities Questionnaire

The Functional Activities Questionnaire is a measure of IADLs.[521,522] It is completed by a person (usually an adult family member) who knows the client well, has seen the client's behavior, and can assess the client's ability to complete IADLs and how much assistance the client needs to complete them, if any.

Fall Risk Assessment

Older people are at an increased risk of falling, and substance misuse can increase this risk. Falling is the number one cause of injury among people ages 65 and older.[523] Each year, more than 800,000 adults are hospitalized for a fall.[524] Between 30 and 40 percent of adults in the community (that is, not in a hospital) ages 65 and older fall at least once each year. In 2014 alone, older Americans had approximately 29 million falls, which resulted in roughly 7 million injuries.[525] Falls are not only potentially dangerous, they can be expensive as well. The direct cost of care for nonfatal fall-related injuries in older adults in the United States is estimated to be more than $31 billion a year.[526]

Physical and mental conditions (including substance misuse) that can increase an older person's fall risk include:[527,528,529,530,531,532]

- Dementia.
- Delirium.
- Cognitive problems in general.
- Depression.
- Poor sleep.
- Use of multiple medications, especially antidepressants.
- Benzodiazepine use.
- Excessive alcohol use.

How do you know which client does and does not need a fall assessment? The American Geriatrics Society and the British Geriatrics Society[533] suggest you **ask yourself three simple questions:**

- Has the client had two or more falls in the past year?
- Has the client had a recent fall?
- Does the client have trouble with walking or balance?

If you answered "yes" to any of these questions, you may want to assess the client for fall risk.

Timed Up & Go Test

The CDC's Timed Up & Go is one of the easiest ways to assess a client's fall risk. This test measures a person's ability to stand from a sitting position, walk a short distance (10 feet), turn around, and walk back to where the individual was sitting. Instructions for how to give the Timed Up & Go are available online (www.cdc.gov/steadi/pdf/TUG_Test-print.pdf).

Determining Diagnosis and Severity of an SUD

Because diagnosing SUDs in older adults differs from diagnosing SUDs in younger adults, try:

- Using DSM-5 criteria to make an SUD diagnosis.[534] Using an SUD assessment instrument based on DSM-5 criteria will improve diagnostic accuracy. However, not all DSM-5 diagnostic criteria apply to older adults. Always use clinical judgment when making an SUD diagnosis.
- Using diagnostic decision trees made specifically for SUD in older clients.
- Making a treatment plan only after getting a positive substance misuse screen, completing a full assessment, and making a diagnosis of SUD.

- Knowing how to keep older adults interested and willing participants in the screening and assessment process (e.g., knowing what to say to older clients and how to say it).

If diagnostic criteria are met, also find out the severity of the diagnosis. You can do this by counting the number of DSM-5 SUD criteria met by the client's symptoms.[535]

- A mild SUD is present when 2 or 3 of the 11 SUD diagnostic criteria are met.
- A moderate SUD is present when 4 or 5 criteria are met.
- A severe SUD is present when 6 or more criteria are met.

Keep in mind that DSM-5 criteria should be interpreted in an age-appropriate manner. (See Chapter 4 for examples of how DSM-5 criteria for AUD might not be age appropriate.) For instance, tolerance is a DSM-5 criterion for an SUD diagnosis. But older people are more likely to achieve tolerance faster and on smaller amounts of the substance than younger adults. Therefore, tolerance in an older individual does not necessarily mean that they are dependent on the substance. Also remember that symptoms of SUDs are often the same as symptoms of other physical diseases and mental disorders. You must rule out these other mental and physical disorders before making an SUD diagnosis.

Remember that **not every addiction treatment provider is qualified to make a mental disorder diagnosis.** If you do not have the training and licensure to make diagnoses, send the client to another provider in your program who can. If no one in your program has the required qualifications, refer the client to another program that does. Integrated programs can be particularly effective at meeting older adults' full range of biopsychosocial needs and may be a suitable referral option. When possible, help facilitate these referrals by offering a "warm handoff" of clients to the referred provider, which helps ensure that clients are able to successfully access mental health services.

Treatment Planning, Referrals, and Treatments

Treatment Planning

Treatment planning includes preparing to provide treatment or refer to the most appropriate treatment provider. You should start with treatment planning, and then either give the treatment or refer to an outside provider if your program cannot provide the services or level of care the client needs. Although rare, age-specific treatment settings and programs may provide the most effective care for older clients.

The foundation of treatment planning is individualized assessment. This should be done systematically with a tool such as the Level of Care Utilization System for Psychiatric and Addiction Services (LOCUS 20).[536] LOCUS allows the user to characterize the following dimensions based on client strengths, challenges, resources, and risks and produce a specific rating:

- Risk of Harm
- Functional Status
- Medical, Addictive and Psychiatric Co-Morbidity
- Recovery Environment both in terms of level of stress and level of support
- Treatment and Recovery History
- Engagement and Recovery Status

For older adults, be sure to think also about age-related factors when making decisions about where to place the client for treatment. For example, if a client uses a wheelchair, you will want to select a treatment setting that the individual can access. Clients who are Deaf or Hard of Hearing may need individual therapy, small-group therapy tailored to their hearing needs, or both. LOCUS 20 describes six broadly defined levels of care and provides a decision tree and grid to help you map the multidimensional assessment of the client to the level of care most likely to meet their needs. The six levels of care are:

- Recovery Maintenance/Health Management.
- Low Intensity Community Based Services.
- High Intensity Community Based Services.
- Medically Monitored Non-Residential Services.
- Medically Monitored Residential Services.
- Medically Managed Residential Services.

The LOCUS 20 tool can be downloaded for free from www.communitypsychiatry.org/resources/locus.

Using Shared Decision Making

Shared decision making helps people who are receiving treatment for or in recovery from an SUD feel more involved in their own care. Decision making should involve the client in determining preferences for treatment. Statements like those below can help clients participate in the shared decision-making process:

- "I want to work with you to find the best treatment setting possible for you and your needs."
- "Let's see what your spouse and brother think about these treatment options." (Be sure to get the client's consent before speaking with family.)
- "Let's review your smoking cessation options so that you know everything that is available to you."
- "Many people do not understand what 'intensive outpatient addiction treatment' means. Let's talk about that so I can clear up any misunderstandings and answer any questions you might have."
- "You said you would like to hear more about inpatient detoxification. Let me review with you the admission requirements so we can figure out whether this type of setting is best for you."
- "I know we talked about many treatment options today. Why don't you tell me what you think would be the best fit, and then I can share with you my thoughts about the best option. I'll bet we can find something we both agree on."

When cognitive impairment is present, you may need to adapt these statements to elicit an older adult's feedback. Nonetheless, best practices suggest that service providers, healthcare professionals, and guardians maximize each individual's input in the healthcare decision-making process.[537,538]

Research supports involving clients with SUDs in treatment decision-making processes.[539] In some cases, matching clients' substance-related treatment preferences has led to improved outcomes.[540] However, shared decision making in the context of SUDs can be challenging. Clients who have SUDs may have mixed feelings about whether they can, or even want to, stop using substances. This is where MI can be a useful tool.

MI

Motivational interviewing is a client-centered approach to treatment planning that can be used with shared decision making. Combined, these methods can help clients feel confident in their treatment decisions and ability to change their substance misuse.[541]

MI has been reported to be effective for people with many different health conditions, including SUDs.[542] **It has been used successfully with older adults** to help improve physical health and health-related behaviors (e.g., weight loss, exercise) as well as substance misuse (including alcohol misuse and tobacco use).[543] MI can help clients:[544]

- Address any mixed feelings they have about entering treatment.
- Explore their thoughts about changing their behaviors, such as cutting down on alcohol use or monitoring their prescription medication intake.
- Develop personal and meaningful reasons for wanting to change their behaviors.
- Create an action plan for how they will change their behaviors.

Referrals

If your program cannot offer treatment for SUDs, refer your clients to counseling and tailored psychosocial supports that have the capacity to meet older adults' unique needs. You should refer to the level of care that is the least intense yet will address all the client's needs. The following paragraphs describe several options.

A safe withdrawal is the first order of business. If detoxification is needed, that will be the first referral indicated, whether inpatient or outpatient. **Develop a plan for seamless transitions between services and warm patient handoffs.**

Refer for SUD treatment and mental health services as needed. You may need to refer the client to an outside provider for SUD treatment if your setting cannot offer the level of care or types of services the client's symptoms warrant. For example, a client may need inpatient drug and alcohol rehabilitation, but your program only offers outpatient care.

Referral to mental health services is appropriate if the severity or type of mental illness is beyond what you can treat. Clients with depression, PTSD, or other mental disorders may be more likely to succeed in addiction treatment if those conditions are managed.

When considering referral for treatment, first consider the client's thinking abilities. Problems with thinking could affect a client's ability to participate in treatment. The client might need a treatment provider who has experience working with older clients with cognitive problems. Individual treatment rather than group treatment might also be a better choice.

Even if you refer to formal SUD treatment elsewhere, you can still support the client. Follow up with him or her by periodically asking about current substance use and progress in treatment. Use these questions as an opportunity to identify clients at risk for relapse while offering positive reinforcement in a warm and nonjudgmental manner. Addiction treatment providers can also provide ongoing support and encouragement to older clients who enter the formal treatment system by:

- Learning about treatment resources in the community that offer appropriate services. (See "Resource Alert: Making the Most of Your Referral Resources.")
- Keeping in touch with the client's specific treatment program. This can help you make sure the program is offering appropriate care. It will also help you understand the approach and services the program offers so you can appropriately refer future clients there.
- Asking the treatment program to share with you, from time to time, reports about the treatment plan and how the client is doing in treatment. (Get the client's written permission before doing so.)
- Stressing the importance of continuing with treatment when discussing progress with the client.

Make referrals to medical services that provide respectful, consistent physical health care. This can help clients recover from substance misuse. As with any client, you should make appropriate referrals for medical care that is beyond what your practice setting offers.

Make referrals to mutual-help groups for clients who wish to join such groups in addition to receiving addiction treatment or mental health services. These programs can offer clients social support and encouragement to help them avoid substance misuse. (See "Mutual-Help Programs" below.)

Make referrals to additional services that meet clients' needs. In addition to SUD treatment, mental health, and medical services, older adults who have SUDs may need additional support in certain areas. They may benefit from help in areas like:

- Case management.
- Food access.
- Housing.
- Transportation.
- Legal assistance.
- In-home services and supports to facilitate completing ADLs and IADLs.
- Insurance-related needs (e.g., assistance enrolling in Medicare, Medicaid, or both).

RESOURCE ALERT: MAKING THE MOST OF YOUR REFERRAL RESOURCES

Having a collection of substance-related treatment referral resources on hand will help you give clients more options and better access to care. Ask yourself the following questions to help make the most of the available referral resources.

What specialized SUD treatment programs are in my community?

Most communities have a public or private agency that keeps a directory of SUD treatment programs. This directory can give useful information about program facilities (e.g., type, location, hours, accessibility to public transportation), services, eligibility criteria, cost, and staff experience, including languages spoken. Each state also has a single state-level alcohol and drug agency that oversees the licensing and program review for all SUD treatment programs in that state. This agency often offers a statewide directory of all SUD treatment programs licensed in the state.

- You can find SUD treatment facilities by using https://findtreatment.gov/.
- SAMHSA offers a Behavioral Health Treatment Services Locator (https://findtreatment.samhsa.gov/) and a National Directory of Drug and Alcohol Abuse Treatment Facilities (https://www.samhsa.gov/data/sites/default/files/reports/rpt23267/National_Directory_SA_facilities.pdf).

Who are my local resources and points of contact? Reach out to local resources and introduce yourself. Learn what services they offer. This will help you get clients into the system of care more quickly.

What mutual-help groups are in my community? What do they offer older clients specifically? Keep on hand names of mutual-help groups that can meet older clients' age-related needs. For instance, Seniors In Sobriety (SIS) (www.seniorsinsobriety.com) is a part of Alcoholics Anonymous (AA). SIS maintains an online list of SIS and senior-friendly AA meetings in several states (http://www.seniorsinsobriety.com/wp-content/uploads/2019/03/SISMeetings-Mar2019.pdf).

Treatments

Older adults can and do benefit from SUD treatment, although less is known about what works for older adults than for other age groups.[545] **Older adults who get SUD treatment may show the same levels of abstinence as younger adults.[546] In some cases, older adults have had even more success than younger adults.[547,548]** More treatment (e.g., more outpatient sessions, longer inpatient stays) can improve older adults' treatment outcomes.

Mental Health Services

A range of mental health interventions exist for older adults who misuse substances. Effective psychosocial treatments and levels of care that have worked for older clients include:[549,550,551,552]

- Motivational enhancement.
- Cognitive–behavioral therapy.
- Individual and group therapy.
- Supportive therapy.
- Pharmacological treatments.
- Couples and family therapy.
- Brief advice or targeted education.
- Telephone-based brief interventions.
- Relationship enhancement therapy.
- Case management.
- Outpatient treatment.
- Inpatient treatment.

Many of these treatments can also address MDD, PTSD, and other CODs in older clients who misuse substances. To get the best results, recommend mental health services that meet older adults' special needs. Age-related needs often relate to the unique stressors and life events, like retirement, death of a significant individual, or moving into a nursing home, that older adults are likely to experience.

Mutual-Help Programs

Well-known mutual-help programs include the 12-Step programs AA and Narcotics Anonymous. Many other peer-recovery support groups are available as well, like:

- Women for Sobriety.
- SMART (Self-Management and Recovery Training) Recovery.
- LifeRing Secular Recovery.
- Secular Organizations for Sobriety/Save Our Selves.
- Celebrate Recovery.
- Double Trouble in Recovery (for people with CODs).
- Dual Recovery Anonymous (for people with CODs).

Mutual-help programs offer older adults a network of peers with whom they can relate. These groups help older adults share common experiences in substance misuse and recovery. Mutual-help programs also help keep clients socially active and reduce loneliness. These groups and their availability vary greatly in various parts of the county. Some will not be available in many localities, but online and telephone meetings may be available.

Finding local mutual-help programs that are only for older adults can be difficult. Instead, try to find local groups that are open to adjusting their sessions toward older clients and their needs (e.g., using a slower pace, being willing to discuss life-stage changes and loss). You should also look for local groups that already have older-age attendees.[553]

RESOURCE ALERT: AA AND OLDER ADULTS

AA offers a large-print handout for older adults interested in attending an AA meeting. This handout is titled *A.A. for the Older Alcoholic—Never Too Late*. Consider sharing this with older clients who misuse alcohol and express an interest in learning more about 12-Step programs.

(Available at www.aa.org/assets/en_US/p-22_AAfortheOlderAA.pdf)

Summary

A well-thought-out approach to comprehensive screening and assessment will help you identify older adults with or at risk for substance misuse and related conditions. This is an important step in making sure clients get the right diagnosis and timely treatment (or treatment referral). The many screening tools approved for use with older adults can help you detect substance misuse. In addition, numerous measures can help you identify conditions common in older people with substance misuse. These conditions include problems with thinking, depression, anxiety, PTSD, elder abuse, sleep problems, chronic pain, struggles with ADLs, and risk of falling. Indepth assessments allow you to better understand the full range of factors in clients' substance misuse. Screening and assessment results contribute to client-centered care by helping you offer treatment options that meet clients' individual symptoms, risk factors, treatment needs, and treatment preferences.

Remember that a wide range of providers in many different settings can be involved in helping to identify, screen, and assess older clients for substance misuse. There's no "wrong door" through which older adults can receive a diagnosis and the treatment they need.

Chapter 3 Resources

Alcohol and Drug Use Screening

National Institute on Alcohol Abuse and Alcoholism (NIAAA)—Professional Education Materials (www.niaaa.nih.gov/publications/clinical-guides-and-manuals): NIAAA offers links to screening, treatment planning, and general information for clinicians in outpatient programs.

NIDA—NIDAMED: Clinical Resources (www.drugabuse.gov/nidamed-medical-health-professionals): This webpage offers resources for healthcare professionals on the effects of substance misuse on clients' health and on ways to identify substance use early and prevent it from turning into misuse.

Tobacco Screening and Cessation

Agency for Healthcare Research and Quality—Five Major Steps to Intervention (www.ahrq.gov/prevention/guidelines/tobacco/5steps.html): The agency provides guidance to clinicians for using the "5 A's" approach (Ask, Advise, Assess, Assist, Arrange) for determining whether clients are ready and willing to quit tobacco use.

CDC—Smoking & Tobacco Use (www.cdc.gov/tobacco/index.htm): CDC offers resources and information for clients and clinicians, including links to factsheets, tobacco prevention and control data, and clinical tools.

HHS—BeTobaccoFree.gov (https://betobaccofree.hhs.gov/): People with nicotine addiction can use this website to connect with counselors, get free text messages supporting their efforts to quit, and download smartphone apps to help them stay smoke free. The site also links to federal reports and research on tobacco use.

HHS—Million Hearts Initiative: Tobacco Use (https://millionhearts.hhs.gov/tools-protocols/tools/tobacco-use.html): Providers can use the tools on this webpage to improve the tobacco use interventions they undertake as part of clinical care.

MaineHealth Center for Tobacco Independence—Provider Tobacco Treatment Tools (https://ctimaine.org/resources/provider-tools/): The center makes available the Fagerström screening tools for nicotine dependence, including dependence on smokeless tobacco. The center's webpage also includes other assessment tools, motivational documents, and information on tobacco treatment medications and treatment in group settings.

University of California, San Francisco Smoking Cessation Leadership Center—Toolkits (https://smokingcessationleadership.ucsf.edu/resources/toolkits): This webpage has downloadable provider toolkits on tobacco screening and cessation from a variety of sources, including the American Lung Association and CDC.

Referral and Treatment Locators

FindTreatment.gov (https://findtreatment.gov): People seeking treatment for SUDs can use this federal locator maintained by SAMHSA to find treatment facilities based on location, availability of treatment for co-occurring mental disorders, availability of telemedicine care, payment option, age, languages spoken, and access to medication for OUD. The site also links to information on understanding addiction, understanding mental illness, and paying for treatment.

SAMHSA—Behavioral Health Treatment Services Locator (https://findtreatment.samhsa.gov): SAMHSA offers people seeking treatment for addiction or mental illness a confidential, anonymous information source about treatment facilities in the United States and U.S. Territories.

SAMHSA—Opioid Treatment Program Directory (https://dpt2.samhsa.gov/treatment/directory.aspx): SAMHSA provides a state-by-state directory of opioid treatment programs.

SAMHSA—*Your Recovery Is Important: Virtual Recovery Resources* (www.samhsa.gov/sites/default/files/virtual-recovery-resources.pdf): This listing of virtual recovery resources includes mutual-help groups with online meetings.

Treatment Planning

SAMHSA—Decisions in Recovery: Treatment for Opioid Use Disorder (https://mat-decisions-in-recovery.samhsa.gov/): People with opioid use disorder can use this website's interactive tool to make informed decisions about their care. The site also includes links to a video library, recovery tools, and other recovery-related resources.

Chapter 3 Appendix

Alcohol Use Disorders Identification Test (AUDIT): Interview Version

Read questions as written. Record answers carefully. Begin the AUDIT by saying "Now I am going to ask you some questions about your use of alcoholic beverages during this past year." Explain what is meant by "alcoholic beverages" by using local examples of beer, wine, vodka, etc. Code answers in terms of "standard drinks." Place the correct answer number in the box at the right.

1. How often do you have a drink containing alcohol?
   (0) Never [Skip to Qs 9-10]
   (1) Monthly or less
   (2) 2 to 4 times a month
   (3) 2 to 3 times a week
   (4) 4 or more times a week

2. How many drinks containing alcohol do you have on a typical day when you are drinking?
   (0) 1 or 2
   (1) 3 or 4
   (2) 5 or 6
   (3) 7, 8, or 9
   (4) 10 or more

3. How often do you have six or more drinks on one occasion?
   (0) Never
   (1) Less than monthly
   (2) Monthly
   (3) Weekly
   (4) Daily or almost daily
   Skip to Questions 9 and 10 if Total Score for Questions 2 and 3 = 0

4. How often during the last year have you found that you were not able to stop drinking once you had started?
   (0) Never
   (1) Less than monthly
   (2) Monthly
   (3) Weekly
   (4) Daily or almost daily

5. How often during the last year have you failed to do what was normally expected from you because of drinking?
   (0) Never
   (1) Less than monthly
   (2) Monthly
   (3) Weekly
   (4) Daily or almost daily

6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?
   (0) Never
   (1) Less than monthly
   (2) Monthly
   (3) Weekly
   (4) Daily or almost daily

7. How often during the last year have you had a feeling of guilt or remorse after drinking?
   (0) Never
   (1) Less than monthly
   (2) Monthly
   (3) Weekly
   (4) Daily or almost daily

8. How often during the last year have you been unable to remember what happened the night before because you had been drinking?
   (0) Never
   (1) Less than monthly
   (2) Monthly
   (3) Weekly
   (4) Daily or almost daily

9. Have you or someone else been injured as a result of your drinking?
   (0) No
   (2) Yes, but not in the last year
   (4) Yes, during the last year

10. Has a relative or friend or a doctor or another health worker been concerned about your drinking or suggested you cut down?
    (0) No
    (2) Yes, but not in the last year
    (4) Yes, during the last year

Record total of specific items here

Scoring: The cutoff score indicating hazardous and harmful alcohol use for the AUDIT is generally 8; however, for older adults a score of 5 indicates a need for clarifying questions and further assessment.[554]

Adapted from Barbor et al. (2001).[555]

Alcohol Use Disorders Identification Test-C (AUDIT-C)

Patient Name: _____ **Date:** _____

1. **How often do you have a drink containing alcohol?**
   - ☐ a. Never
   - ☐ b. Monthly or less
   - ☐ c. 2-4 times a month
   - ☐ d. 2-3 times a week
   - ☐ e. 4 or more times a week

2. **How many drinks containing alcohol did you have on a typical day when you were drinking in the past year?**
   - ☐ a. 0 drinks
   - ☐ b. 1 or 2
   - ☐ c. 3 or 4
   - ☐ d. 5 or 6
   - ☐ e. 7 to 9
   - ☐ f. 10 or more

3. **How often do you have six or more drinks on one occasion?**
   - ☐ a. Never
   - ☐ b. Less than monthly
   - ☐ c. Monthly
   - ☐ d. Weekly
   - ☐ e. Daily or almost daily

The AUDIT-C is a much shorter version of the AUDIT that can help you identify alcohol misuse in your clients. It contains only three questions, which add up to a total score of 0–12. A higher score usually means the client is engaging in more hazardous alcohol use. The AUDIT-C is scored as follows:

- For Questions 1 and 3, assign 0 points to response a, 1 point to response b, 2 points to response c, 3 points to response d, and 4 points to response e.
- For Question 2, assign 0 points to responses a and b, 1 point to response c, 2 points to response d, 3 points to response e, and 4 points to response f.

A total score of 3 or higher for women and 4 or higher for men means problematic alcohol use. In such cases, you should assess further (or refer for formal assessment) to learn more about the client's drinking habits and determine whether AUD is present. Learn more about the AUDIT-C, including how to score and interpret results, at www.queri.research.va.gov/tools/alcohol-misuse/alcohol-faqs.cfm#top.

Adapted from material in the public domain.[556,557]

Short Michigan Alcoholism Screening Test-Geriatric Version (SMAST-G)

		Yes (1)	No (0)
1.	When talking with others, do you ever underestimate how much you drink?		
2.	After a few drinks, have you sometimes not eaten or been able to skip a meal because you didn't feel hungry?		
3.	Does having a few drinks help decrease your shakiness or tremors?		
4.	Does alcohol sometimes make it hard for you to remember parts of the day or night?		
5.	Do you usually take a drink to relax or calm your nerves?		
6.	Do you drink to take your mind off your problems?		
7.	Have you ever increased your drinking after experiencing a loss in your life?		
8.	Has a doctor or nurse ever said they were worried or concerned about your drinking?		
9.	Have you ever made rules to manage your drinking?		
10.	When you feel lonely, does having a drink help?		

TOTAL SMAST-G-SCORE (0-10) _____

SCORING: 2 OR MORE "YES" RESPONSES IS INDICATIVE OF AN ALCOHOL PROBLEM.

Ask the extra question below but do not calculate it in the final score.
Extra question: Do you drink alcohol and take mood or mind-altering drugs, including prescription tranquilizers, prescription sleeping pills, prescription pain pills, or any illicit drugs?

Senior Alcohol Misuse Indicator (SAMI)

1a. Have you recently (in the last few months) experienced problems with any of the following (if yes, please check box):

- ☐ Changes in sleep?
- ☐ Drowsiness?
- ☐ Changes in appetite or weight?
- ☐ Difficulty remembering things?
- ☐ Dizziness?
- ☐ Poor balance?
- ☐ Falls?

1b. Have you recently (in the last few months) experienced problems with any of the following (if yes, please check box):

- ☐ Feelings of sadness?
- ☐ Loneliness?
- ☐ Lack of interest in daily activities?
- ☐ Feelings of anxiety?
- ☐ Feelings of worthlessness?

2. Do you enjoy wine/beer/spirits? Which do you prefer?

_____

3. As your life has changed, how has your use of [selected] wine/beer/spirits changed?

_____

4. Do you find you enjoy [selected] wine/beer/spirits as much as you used to?
(For clinical use. Not included in scoring.)
☐ Yes ☐ No

5. You mentioned that you have difficulties with_____ (from answers to questions 1a and b). I am wondering if you think that [selected] wine/beer/spirits might be connected? ☐ Yes ☐ No

SCORING KEY

Single responses (a score of 1 for each response):

Question 2:

I enjoy **all three** of wine/beer/spirits OR

I enjoy **a combination of any two** from wine/beer/spirits ☐

Question 3:
I have **increased** alcohol consumption from when I was younger ☐

Question 5:
Yes, there **may be** a connection between my alcohol use and health ☐

SUBTOTAL 1 = _____ /3

Multiple responses (a score of 1 for each combination of responses):

Question 2 & 3:

Yes, I do enjoy alcohol

There has been **no change** in alcohol consumption

=> If both responses provided, check box => ☐

Question 1, 2 & 3:
Yes, I have experienced **5 or more** symptoms

Yes, I do enjoy alcohol

Indicates any current alcohol consumption (regardless of any change in pattern)

=> If all three responses provided, check box => ☐

SUBTOTAL 2 = _____ /2

TOTAL SCORE = SUBTOTAL 1 + SUBTOTAL 2 = _____

Cannabis Use Disorder Identification Test-Revised (CUDIT-R)

Have you used any cannabis over the past six months? YES/NO

If YES, please answer the following questions about your cannabis use. Circle the response that is most correct for you in relation to your cannabis use *over the past six months.*

1. How often do you use cannabis?

Never	Monthly or less	2-4 times a month	2-3 times a week	4 or more times a week
0	1	2	3	4

2. How many hours were you "stoned" on a typical day when you had been using cannabis?

Less than 1	1 or 2	3 or 4	5 or 6	7 or more
0	1	2	3	4

3. How often during the past 6 months did you find that you were not able to stop using cannabis once you had started?

Never	Less than monthly	Monthly	Weekly	Daily or almost daily
0	1	2	3	4

4. How often during the past 6 months did you fail to do what was normally expected from you because of using cannabis?

Never	Less than monthly	Monthly	Weekly	Daily or almost daily
0	1	2	3	4

5. How often in the past 6 months have you devoted a great deal of your time to getting, using, or recovering from cannabis?

Never	Less than monthly	Monthly	Weekly	Daily or almost daily
0	1	2	3	4

6. How often in the past 6 months have you had a problem with your memory or concentration after using cannabis?

Never	Less than monthly	Monthly	Weekly	Daily or almost daily
0	1	2	3	4

7. How often do you use cannabis in situations that could be physically hazardous, such as driving, operating machinery, or caring for children?

Never	Less than monthly	Monthly	Weekly	Daily or almost daily
0	1	2	3	4

8. Have you ever thought about cutting down, or stopping, your use of cannabis?

Never	Yes, but not in the past 6 months	Yes, during the past 6 months
0	2	4

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Penn State Worry Questionnaire (PSWQ)

Instructions: Rate each of the following statements on a scale of 1 ("not at all typical of me") to 5 ("very typical of me"). Please do not leave any items blank.

	Not at all typical of me				Very typical of me
1. If I do not have enough time to do everything, I do not worry about it.	1	2	3	4	5
2. My worries overwhelm me.	1	2	3	4	5
3. I do not tend to worry about things.	1	2	3	4	5
4. Many situations make me worry.	1	2	3	4	5
5. I know I should not worry about things, but I just cannot help it.	1	2	3	4	5
6. When I am under pressure I worry a lot.	1	2	3	4	5
7. I am always worrying about something.	1	2	3	4	5
8. I find it easy to dismiss worrisome thoughts.	1	2	3	4	5
9. As soon as I finish one task, I start to worry about everything else I have to do.	1	2	3	4	5
10. I never worry about anything.	1	2	3	4	5
11. When there is nothing more I can do about a concern, I do not worry about it anymore.	1	2	3	4	5
12. I have been a worrier all my life.	1	2	3	4	5
13. I notice that I have been worrying about things.	1	2	3	4	5
14. Once I start worrying, I cannot stop.	1	2	3	4	5
15. I worry all the time.	1	2	3	4	5
16. I worry about projects until they are all done.	1	2	3	4	5

Scoring: Each of the 16 items is rated on a 5-point scale. Items 1, 3, 8, 10, and 11 are reverse scored as follows:

- Very typical of me = 1 (circled 5 on the sheet)
- Circled 4 on the sheet = 2
- Circled 3 on the sheet = 3
- Circled 2 on the sheet = 4
- Not at all typical of me = 5 (circled 1 on the sheet)

The remaining items are scored regularly. The item scores are added to produce a total score ranging from 16 to 80, with higher scores reflecting more worry. **A score of 50 or higher by an older person could mean significant worries are present,** but research on cutoff scores in older people is too limited to know for certain.[562] Do not assume that an older client who scores below 50 does not have anxiety.

Primary Care PTSD Screen for DSM-5 (PC-PTSD-5)

Sometimes things happen to people that are unusually or especially frightening, horrible, or traumatic. For example:

- a serious accident or fire
- a physical or sexual assault or abuse
- an earthquake or flood
- a war
- seeing someone be killed or seriously injured
- having a loved one die through homicide or suicide.

Have you ever experienced this kind of event?

YES NO

If no, screen total = 0. Please stop here.

If yes, please answer the questions below.

In the past month, have you...

1. had nightmares about the event(s) or thought about the event(s) when you did not want to?

   YES NO

2. tried hard not to think about the event(s) or went out of your way to avoid situaitons that reminded you of the event(s)?

   YES NO

3. been constantly on guard, watchful, or easily startled?

   YES NO

4. felt numb or detached from people, activities, or your surroundings?

   YES NO

5. felt guilty or unable to stop blaming yourself or others for the event(s) or any problems the event(s) may have caused?

   YES NO

Reprinted from material in the public domain.[563] *This tool and additional information on it can be found online (www.ptsd.va.gov/professional/assessment/documents/pc-ptsd5-screen.pdf).*

Scoring: A score of 3 or more "yes" responses is considered positive.[564]

Elder Abuse Suspicion Index© (EASI©)

EASI© Questions Q.1-Q.5 asked of patient; Q.6 answered by doctor *(Within the last 12 months)*			
1) Have you relied on people for any of the following: bathing, dressing, shopping, banking, or meals?	**YES**	**NO**	**Did not answer**
2) Has anyone prevented you from getting food, clothes, medication, glasses, hearing aids or medical care, or from being with people you wanted to be with?	**YES**	**NO**	**Did not answer**
3) Have you been upset because someone talked to you in a way that made you feel shamed or threatened?	**YES**	**NO**	**Did not answer**
4) Has anyone tried to force you to sign papers or to use your money against your will?	**YES**	**NO**	**Did not answer**
5) Has anyone made you afraid, touched you in ways that you did not want, or hurt you physically?	**YES**	**NO**	**Did not answer**
6) **Doctor:** Elder abuse may be associated with findings such as: poor eye contact, withdrawn nature, malnourishment, hygiene issues, cuts, bruises, inappropriate clothing, or medication compliance issues. Did you notice any of these today or in the last 12 months?	**YES**	**NO**	**Not sure**

Reprinted with permission. Yaffe MJ, Wolfson C, Weiss D, Lithwick M. Development and validation of a tool to assist physicians' identification of elder abuse: The Elder Abuse Suspicion Index (EASI©). Journal of Elder Abuse and Neglect, 2008; 20 (3): 276-300. This tool is available online (www.mcgill.ca/familymed/research/projects/elder).

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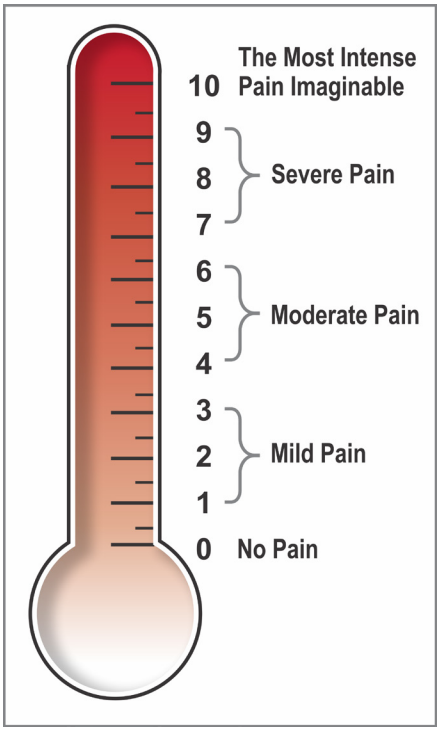
Revised Iowa Pain Thermometer (IPT-R)

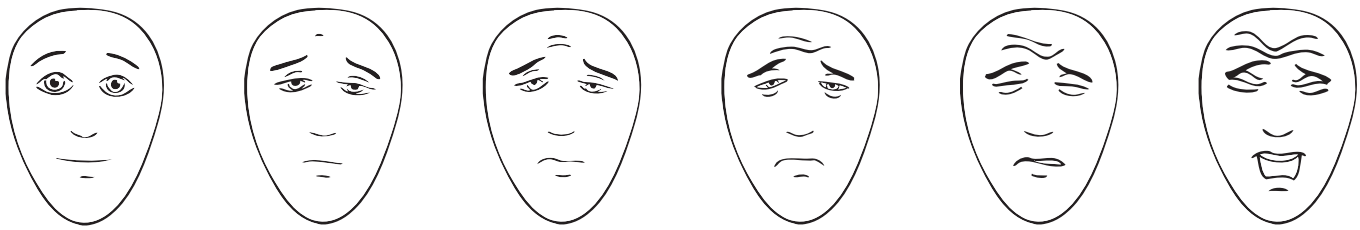


Revised Iowa Pain Thermometer (IPT-R, 2011) printed with permission. © Keela Herr, The University of Iowa.[565]

Revised Faces Pain Scale

In the following instructions, say "hurt" or "pain," whichever seems right for a particular client. "These faces show how much something can hurt. This face [point to face on far left] shows no pain. The faces show more and more pain [point to each from left to right] up to this one [point to face on far right]—it shows very much pain. Point to the face that shows how much you hurt [right now]."

Score the chosen face 0, 2, 4, 6, 8, or 10, counting left to right. Therefore, "0" = "no pain" and "10" = "very much pain." Do not use words like "happy" or "sad." This scale is intended to measure how a client feels inside, not how his or her face looks.



Faces Pain Scale – Revised, ©2001, International Association for the Study of Pain [www.iasp-pain.org/FPSR]

Katz Index of Independence in Activities of Daily Living (Katz ADL)

Activities	Independence (1 Point) No supervision, direction, or personal assistance	Dependence (0 Points) With supervision, direction, personal assistance, or total care
BATHING Points: _____	(1 POINT) Bathes self completely or needs help in bathing only a single part of the body, such as the back, genital area, or disabled extremity.	(0 POINTS) Needs help with bathing more than one part of the body, getting in or out of the tub, or shower. Requires total bathing.
DRESSING Points: _____	(1 POINT) Can get clothes from closet and drawers and put on clothes and outer garments complete with fasteners. May have help tying shoes.	(0 POINTS) Needs help with dressing self or needs to be completely dressed.
TOILETING Points: _____	(1 POINT) Goes to the toilet, gets on and off, arranges clothes, and cleans genital area without help.	(0 POINTS) Needs help transferring to the toilet or cleaning self or uses bedpan or commode.
TRANSFERRING Points: _____	(1 POINT) Moves in and out of bed or chair unassisted. Mechanical transfer aids are acceptable.	(0 POINTS) Needs help in moving from bed to chair or requires a complete transfer.
CONTINENCE Points: _____	(1 POINT) Exercises complete self-control over urination and defecation.	(0 POINTS) Is partially or totally incontinent of bowel or bladder.
FEEDING Points: _____	(1 POINT) Gets food from plate into mouth without help. Preparation of food may be done by another person.	(0 POINTS) Needs partial or total help with feeding or requires parenteral feeding.
Total Points: _____ A score of 6 indicates full function; 4, moderate impairment; and 2 or less, severe functional impairment.		
Adapted from Katz, S., Down, T. D., Cash, H. R., & Grotz, R. C. Progress in the development of the index of ADL. Gerontologist 1970, 10(1):20–30. By permission of The Gerontological Society of America.[566]		

Chapter 4—Treating Alcohol Misuse in Older Adults

KEY MESSAGES

- Older adults are more likely than younger adults to feel the negative effects of alcohol and are at risk for alcohol–drug interactions. Therefore, widespread screening for alcohol use and misuse in all healthcare settings and emergency departments is recommended.
- Screening and assessment tools and treatment options for alcohol misuse among older adults should be senior friendly and meet their unique physical, emotional, and social needs.
- Education about low-risk levels of alcohol use and about alcohol–drug interactions can be a powerful brief intervention as well as a prevention tool in keeping seniors safe.
- You can help increase your older clients' chances of success by offering many different treatment choices based on their symptoms and needs; addressing all co-occurring health conditions; and using a stepped-care approach to the management of referrals and ongoing coordination of care.

Chapter 4 of this Treatment Improvement Protocol (TIP) will benefit healthcare, behavioral health service, and social service providers working with older adults. It addresses alcohol use and misuse among older adults. National survey data show that alcohol use, binge drinking, and alcohol use disorder (AUD) are increasing in this population at a concerning rate.[567] Addiction counselors and other healthcare providers should understand the unique needs of older adults when addressing alcohol-related issues. Although older adults generally have lower rates of alcohol misuse, including AUD, than younger adults, baby boomers (born between 1946 and 1964) are more likely to drink and have alcohol-related problems than earlier generations of older adults. Even low levels of drinking can lead to negative health effects in older adults because of age-related physical changes, negative interactions between alcohol and commonly used medications, and decreases in physical and cognitive functioning (thinking abilities).

Organization of Chapter 4 of This TIP

This chapter of TIP 26 presents facts about alcohol misuse, including AUD, among older adults. It also addresses screening and assessment, co-occurring health conditions and mental disorders often related to alcohol misuse, and treatment and recovery management approaches for older adults.

The first section of Chapter 4 describes alcohol misuse among older adults. It includes definitions; numbers and figures; and the physical, mental, social, and economic effects of AUD. **It also addresses co-occurring health conditions and mental disorders in older adults who drink.**

The second section addresses screening and assessment of alcohol misuse in older adults. It covers screening tools for alcohol misuse, limitations of the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) diagnostic criteria for AUD as applied to older adults, signs of late-onset AUD, and misuse of alcohol with prescription medications. **This section also addresses screening for and assessing commonly co-occurring health conditions and mental disorders among older adults who drink.**

The third section briefly describes the continuum of care for older adults, including brief interventions for alcohol misuse and inpatient detoxification or rehabilitation.

The fourth section discusses specific treatment approaches for older adults with AUD. These include brief interventions, cognitive–behavioral therapy (CBT), problem-solving therapy (PST), skill-building and relapse prevention therapy (RPT), 12-Step Facilitation (TSF) therapy, age-specific inpatient and outpatient rehabilitation, and pharmacotherapy.

The fifth section explores recovery management strategies for older adults. It covers strategies for including family members in treatment; addressing caregiver needs; and linking older adults to evidence-supported, community-based recovery support groups such as Alcoholics Anonymous (AA) and SMART (Self-Management and Recovery Training) Recovery.

The sixth section presents clinical scenarios to show how to match treatment approaches to a client's level of alcohol misuse, from those who are abstinent (not drinking at all) for health reasons to those with AUD requiring inpatient rehabilitation and ongoing recovery management.

The final section offers targeted resources to support your practice. For more resources related to addressing substance misuse among older adults, including misuse of alcohol, see the Chapter 4 Appendix and the additional resources in Chapter 9 of this TIP.

For definitions of key terms you will see throughout Chapter 4, refer to Exhibit 4.1.

EXHIBIT 4.1. Key Terms

- **Addiction*:** The most severe form of substance use disorder (SUD), associated with compulsive or uncontrolled use of one or more substances. Addiction is a chronic brain disease that has the potential for both recurrence (relapse) and recovery.
- **Age-sensitive:** Adaptations to existing treatment approaches that accommodate older adults' unique needs (e.g., a large-print handout on the signs of substance misuse).
- **Age-specific:** Treatment approaches and practices specifically developed for older adults (e.g., an older adult specialty group in a mixed-age SUD treatment program).
- **Alcohol misuse:** The use of alcohol in any harmful way, including heavy drinking, binge drinking, and AUD.
- **At-risk/high-risk drinking:** Drinking alcohol in excessive amounts. This definition encompasses both binge drinking and heavy drinking. Additionally, any alcohol consumption is considered risky when carried out by individuals with certain medical conditions that are worsened by alcohol, those taking medicine that can interact harmfully with alcohol, those driving a car or engaged in other activities that require alertness, or people recovering from AUD.[568,569] Note that for purposes of this TIP, at-risk drinking and high-risk drinking are synonymous and either term is acceptable to describe an older adult's drinking patterns.
- **AUD:** DSM-5 defines this disorder.[570] An AUD diagnosis is given to people who use alcohol and meet at least 2 of the 11 DSM-5 symptoms in a 12-month period. Key aspects of AUD include tolerance, withdrawal, loss of control, and continued use despite negative consequences. AUD covers a range of severity and replaces what the previous edition of DSM termed alcohol abuse and alcohol dependence.

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- **Binge drinking:** A drinking pattern that leads to blood alcohol concentration levels of 0.08 grams per deciliter or greater. This usually takes place after four or more drinks for women and five or more drinks for men.[571,572] However, older adults are more sensitive to the effects of alcohol, and treatment providers may need to lower these numbers when screening for alcohol misuse.[573] Additionally, other factors such as weight, decrease in enzyme activity, and body composition (e.g., amount of muscle tissue present in the body) can also affect alcohol absorption rates.
- **Caregivers:** Informal caregivers provide unpaid care. They assist others with activities of daily living (ADLs), including health and medical tasks. Informal caregivers may be spouses, partners, family members, friends, neighbors, or others who have a significant personal relationship with the person who needs care. Formal caregivers are paid providers who offer care in one's home or in a facility.[574] Most older adults do not need caregivers and are as able to address their own needs as younger adults, whether or not substance misuse is a factor in their lives.
- **Drug–drug interaction:** The interaction of one substance (e.g., alcohol, medication, an illicit drug) with another substance. Drug–drug interactions may change the effectiveness of medications, introduce or alter the intensity of side effects, and increase a substance's toxicity or the concentration of that substance in a person's blood. Potentially serious interactions can also occur with certain foods, beverages, and dietary supplements.[575]
- **Harmful drinking:** Alcohol use that worsens or complicates current alcohol-related problems.[576]
- **Hazardous drinking:** Alcohol use that increases the risk of future harm.[577]
- **Heavy drinking:** Consuming five or more drinks for men and four or more drinks for women in one period on each of 5 or more days in the past 30 days.[578]
- **Moderate drinking:** According to the 2015–2020 *Dietary Guidelines for Americans,* moderate drinking is defined as up to two drinks per day for men and up to one drink per day for women.[579,580] However, the Centers for Disease Control and Prevention (CDC) notes that these numbers apply to any given day and are not meant as an average over several days.[581] Additionally, individuals who don't metabolize alcohol well may need to consume even lower quantities. Some people, particularly those with certain alcohol-related illnesses or engaging in tasks requiring concentration, should not consume alcohol at all. The *Dietary Guidelines* stipulate that those who don't drink should not begin drinking for any reason.[582]
- **Mutual-help groups:** Groups of people who work together on obtaining and maintaining recovery. Unlike peer support (e.g., the use of recovery coaches or peer recovery support specialists), mutual-help groups consist entirely of people who volunteer their time and typically have no official connection to treatment programs. Most are self-supporting. Although 12-Step groups such as AA and Narcotics Anonymous are the most widespread and well researched type of mutual-help groups, other groups may be available in some areas. They range from groups affiliated with a religion or church (e.g., Celebrate Recovery, Millati Islami) to purely secular groups (e.g., SMART Recovery, Women for Sobriety).
- **Peer support:** The use of peer recovery support specialists (e.g., someone in recovery who has lived experience in addiction plus skills learned in formal training) to provide nonclinical (i.e., not requiring training in diagnosis or treatment) recovery support services to individuals in recovery from addiction and to their families.
- **Recovery*:** A process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential. Even individuals with severe and chronic SUDs can, with help, overcome them and regain health and social function. This is called remission. When those positive changes and values become part of a voluntarily adopted lifestyle, that is called being in recovery. Although abstinence from all substance misuse is a cardinal feature of a recovery lifestyle, it is not the only healthy, prosocial feature.
- **Relapse*:** A return to substance use after a significant period of abstinence.

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- **Remission:** A medical term meaning a disappearance of signs and symptoms of the disease or disorder. DSM-5 defines remission as present in people who previously met SUD criteria but no longer meet any SUD criteria (with the possible exception of craving).[583] Remission is an essential element of recovery.
- **Stepped care:** A science-based approach that matches an individual's treatment needs to different levels of care, from least intensive to most intensive.
- **Substance misuse*:** The use of any substance in a manner, situation, amount, or frequency that can cause harm to users or to those around them. For some substances or individuals, any use would constitute misuse (e.g., underage drinking, injection drug use).
- **Substance use disorder*:** A medical illness caused by repeated misuse of a substance or substances. According to DSM-5,[584] SUDs are characterized by clinically significant impairments in health and social function, and by impaired control over substance use. They are diagnosed through assessing cognitive, behavioral, and psychological symptoms. SUDs range from mild to severe and from temporary to chronic. They typically develop gradually over time with repeated misuse, leading to changes in brain circuits governing incentive salience (the ability of substance-associated cues to trigger substance seeking), reward, stress, and executive functions like decision making and self-control. Multiple factors influence whether and how rapidly a person will develop an SUD. These factors include the substance itself; the genetic vulnerability of the user; and the amount, frequency, and duration of the misuse. Note: A severe SUD is commonly called an addiction. A mild SUD is generally equivalent to what previous editions of DSM called substance abuse; a moderate or severe SUD is generally equivalent to what was formerly called substance dependence.

* The definitions of all terms marked with an asterisk correspond closely to those given in *Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health.* This resource provides a great deal of useful information about substance misuse and its impact on U.S. public health. The report is available online (https://addiction.surgeongeneral.gov/sites/default/files/surgeon-generals-report.pdf).

Alcohol Misuse Among Older Adults

More older adults are misusing alcohol than in earlier years. An estimated 23.2 million adults ages 65 and older drank alcohol in the past month, 5.6 million engaged in past-month binge drinking, and 1.5 million engaged in past-month heavy drinking.[585]

The signs and effects of alcohol misuse, including binge drinking and AUD, often differ between older and younger adults. Understanding the differences will help you identify, assess, and treat older adults.

Age-Specific Effects of Alcohol Use

Older adults metabolize alcohol less efficiently than younger adults. Older adults have less lean body mass and less total body water than younger adults. This smaller water volume is one reason why an older adult and a younger adult can drink similar amounts of alcohol, but the older adult's blood alcohol level will be higher and stay high longer. In addition, older adults' central nervous system (CNS) is more sensitive to alcohol's effects, leading to lower tolerance.[586] These differences can **lead to or worsen chronic illnesses common in older adults (e.g., high blood pressure).**[587]

Drinking also increases health-related risks for older adults who take medications that may interact negatively with alcohol. Older adults are more likely than younger adults to take multiple

medications, further increasing this risk. Moreover, up to 19 percent of older adults in the United States use alcohol and prescription medications in a way that could be considered misuse.[588]

Alcohol Misuse

Older adults can meet the definition of alcohol misuse at lower levels of alcohol use than adults younger than 60. **Older adults who have been drinking for years may face more alcohol-related problems—and those problems may be more severe—even if their use has not increased over time.** A review of survey data indicates that 4 percent to 14 percent of older adults may misuse alcohol.[589]

The rate of alcohol misuse among older adults increases when including health status and overall functioning, rather than just amount of alcohol used and frequency of use. For instance, a study on alcohol-related health risk in older adults in the United States found that among older adults who drink, 53.3 percent had harmful or hazardous use.[590] This number was more than three times greater than the number of older adults consuming alcohol above federal guideline limits. The discrepancy in the consumption rate and the rate of harmful or hazardous use is explained by the health status of older adults.

RESOURCE ALERT: A CONSUMER WEBSITE FOR CALCULATING ALCOHOL CONSUMPTION

Rethinking Drinking: Alcohol & Your Health (www.rethinkingdrinking.niaaa.nih.gov) is a National Institute on Alcohol Abuse and Alcoholism (NIAAA) interactive website that provides individuals with accurate information about what a standard drink is and how to calculate their level of alcohol use based on the types and amounts of alcoholic beverages they drink.

Low-risk drinking guidelines at this website are for *all* adults; they are not reduced for older adults. Discuss why older adults may need to adhere to lower numbers before referring your clients to this website.

Alcohol misuse among older adults is likely responsible for a large portion of the damage some experience to their health and well-being.[591] For the older adult population, drinking even small amounts of alcohol can have serious physical, mental, and social effects. For example, one or two drinks a day may lead to increased cognitive impairment (problems with thinking) for individuals who already have dementia, or sleep problems (e.g., sleep apnea).[592]

The economic costs of alcohol misuse among older adults are significant. Older adults who misuse alcohol are at greater risk for injury and falls. Certain events among older adults that can be related to alcohol use—such as injury deaths, falls treated in emergency departments, hospitalized falls, and fall-related traumatic brain injury deaths—have risen significantly in the past decade.[593]

Older adults who misuse alcohol are at risk for:[594]

- Liver disease.
- Sleep problems.
- Cancer.
- Diabetes.
- Congestive heart failure.
- Lowered general health functioning.

Older adults who drink beyond recommended guidelines have higher rates of tobacco use disorder and are at risk for:[595,596,597]

- Depression, anxiety, and mood disorders.
- Memory problems.
- Cognitive changes such as dementia.
- Sleep disorders.
- Agitation or violent behavior.
- Suicide.

DRINKING IN RETIREMENT COMMUNITIES

Participating in social activities with family and friends who drink reinforces alcohol use and misuse. This is particularly true in retirement communities, where drinking and socializing often go hand in hand.[598] A recent study of a large retirement community in Florida found that 15.4 percent of the respondents to a survey on drinking reported hazardous drinking levels. However, when asked about health-related concerns and quality of life, most responded that drinking was a part of their social lives, did not report many health concerns, and reported a high quality of life.[599]

This result suggests that some older adults whose social drinking exceeds recommended limits may improve their quality of life, which could balance out any potential health risks. However, subjective measures of health-related effects of heavy alcohol use are not always as trustworthy as objective measures, such as lab results for medical conditions. **When you assess the health risks of an older adult's drinking, keep in mind the cultural context of his or her drinking, the amount and frequency of drinking, and any objective measures of health effects in addition to self-report findings.**

Binge Drinking

Binge drinking is a drinking pattern that leads to blood alcohol concentration levels of 0.08 grams per deciliter or greater. On average, this occurs after five or more drinks for men and four or more drinks for women.[600,601] However, for older adults, who have increased sensitivity to alcohol, lower alcohol consumption levels may be considered binge drinking.

According to the National Survey on Drug Use and Health (NSDUH), 10.7 percent of adults ages 65 and older binge drink (defined as five or more drinks for men and four or more drinks for women, per event).[602] This percentage would be even higher if the survey could factor in that binge drinking occurs at lower alcohol consumption levels for some older adults. **Binge drinking appears to be more of an issue for older men than older women.[603]** Yet binge drinking among older women is rapidly increasing.[604]

Binge drinking creates additional health problems for older adults. Binge drinking is related to a number of health and safety issues, including accidents, an increased chance of physical injury (e.g., falls), and higher death rates.[605,606] Binge drinking is also related to a higher risk of AUD in both men and women as they age.[607,608]

AUD

Baby boomers drink more than earlier generations, which is likely to lead to a large increase in the number of older adults with AUD as this generation ages.[609] Furthermore, the number of adults ages 65 and older in the U.S. population is predicted to increase from about 56 million in 2020 to more than 85 million by 2050.[610,611]

In the general population, only an estimated 1.52 percent of adults ages 60 and older report AUD in the past 12 months; 16.1 percent report AUD in their lifetime.[612] Conversely, up to 30 percent of older adults hospitalized in general medical units and up to 50 percent hospitalized in psychiatric units have AUD.[613] This is significant, because older adults with AUD who are hospitalized might not report their level of drinking to healthcare providers and could be at risk for alcohol withdrawal during their hospitalization. So too, these percentages may not capture the actual prevalence of AUD in this population, as DSM diagnostic criteria do not always accurately identify AUD in older adults.[614]

According to the 2019 NSDUH, **10.7%** of adults ages **65** and older **BINGE DRINK.**

Co-Occurring Health Conditions and Mental Disorders

Alcohol use can worsen the effects of many co-occurring mental health and health conditions (e.g., depressive disorders, high blood pressure, and diabetes). In addition, many physiological changes naturally take place during the aging process; clients need to understand that drinking can accelerate these health-related changes.

Anxiety

Anxiety symptoms and anxiety disorders are common in adults ages 60 and older in community and treatment settings.[615] Older adults also have a high rate of co-occurring anxiety disorders and AUD.[616] Anxiety causes high personal distress, reduces life satisfaction, and increases the risk for disability among older adults. Anxiety also increases the risk of death among older adults from suicide and from heart disease.[617] **Older adults who drink to lessen their anxiety increase their health-related risks.**

Depression

Depression is one of the most common co-occurring mental disorders among older adults with AUD. Approximately 4.5 percent of older adults (ages 50 and older) met past-year prevalence of major depression.[618] This estimate does not include those who meet either DSM-5 diagnostic criteria for other depressive disorders or have symptoms of depression that interfere with everyday functioning. The negative effects of depression in older adults include suicide risk, increased cognitive impairment, a higher risk of dementia, and poorer physical health.[619]

Alcohol is a depressant drug (meaning it reduces activity of the CNS). Drinking alcohol can worsen depression or increase the risk of late-life depression.[620] In approximately 30 percent of older adults with co-occurring AUD and depression, the depression is not directly linked to drinking but instead was present before the onset of AUD or developed separately from AUD.[621]

RESOURCE ALERT: TREATING DEPRESSION IN OLDER ADULTS

See SAMHSA's Evidence-Based Practices KIT (Knowledge Informing Transformation) *The Treatment of Depression in Older Adults* (https://store.samhsa.gov/product/Treatment-Depression-Older-Adults-Evidence-Based-Practices-EBP-Kit/SMA11-4631) for more information and treatment strategies.

Diagnosing depression in older adults with AUD is challenging. Depression may be underdiagnosed because its symptoms are similar to those of dementia and common complaints of older adults, such as loss of interests, slowed thinking, lack of energy, or general aches and pains.[622] **Assess depression and other mood disorders at the start of AUD treatment, and reassess from time to time** to learn whether abstinence or a reduction in alcohol use reduces symptoms of depression.

Serious Mental Illness

People with serious mental illness (SMI), like schizophrenia, typically have higher levels of stress, tobacco use, and alcohol use than the general population. They are also more likely to have poor overall health, an inactive lifestyle, and an increased risk of death.[623] **About 19 percent of older adults with SMI have a co-occurring SUD, and AUD is one of the most common.[624]**

Co-occurring AUD and SMI among older adults has not been studied widely. However, alcohol use is a factor in people not taking their psychotropic medication as prescribed, and co-occurring AUD is related to longer length of psychiatric stay and an increase in co-occurring medical conditions.

See Chapter 6 of this TIP for details on the links between alcohol use and dementia among older adults.

Pain

Chronic pain is a common condition in older adults that reduces their ability to move and perform ADLs. A study of U.S. older adults estimated that 52.9 percent, or as many as 18.7 million, have pain that makes their daily functioning difficult.[625]

Older adults with chronic pain who drink to reduce their pain are at risk for late-onset AUD.[626] Drinking while taking pain medications also increases other health-related risks (e.g., serious liver disease, overdose death). Common pain medications older adults may take include nonsteroidal anti-inflammatory drugs (NSAIDs) and opioids (e.g., hydrocodone, oxycodone).

Screening and Assessment

Many older adults who misuse alcohol do not need specialized addiction treatment services. Still, screening and brief educational and motivational interventions can help older adults reduce alcohol use and health-related harms when delivered in healthcare and mental health service settings.[627]

AUD is often underdiagnosed in older adults. Some DSM-5 diagnostic criteria may not apply to them. For example, the criterion of failing to fulfill major duties at work will not apply to an older adult who is retired. Furthermore, **providers may mistake AUD symptoms for other conditions** that are commonly, yet often incorrectly, thought to be normal signs of aging, such as:[628]

- Sleep problems.
- Memory loss.
- Depression.
- Anxiety.
- Aches and pains.
- Poor diet.
- Loss of interest in sex.

Older adults in long-term care settings, such as assisted living and nursing homes, are often not diagnosed or treated for AUD.[629] The key to finding the right interventions for alcohol misuse, including AUD, is to **adapt screening, assessment, and diagnostic criteria to older clients, regardless of the settings in which they receive health or social services.**

Widespread Screening

Widespread screening in healthcare and behavioral health service settings is an opportunity for brief intervention and, when needed, referral to addiction-specific treatment services.[630]

Older adults are often not screened for alcohol misuse because providers hold incorrect beliefs about alcohol use in this population. They may think that older adults don't drink much or, if they do drink, they should be allowed this "one last pleasure" of life.[631] Providers also may choose not to ask older adults about their drinking history and current alcohol use for fear that asking these questions will hurt their relationship with these clients. However, baby boomers tend to be more accepting than earlier generations of the idea of talking about and seeking help for mental disorders and SUDs.

Challenge false beliefs by educating your fellow providers and supporting widespread alcohol screening as a normal, ongoing practice. Doing so can help reduce any mixed feelings providers have about screening older adults. It can also increase the chances of identifying alcohol misuse early in older clients. (Chapter 3 of this TIP offers more information on screening and assessing for substance misuse in older adults.)

WHEN TO SCREEN OLDER ADULTS FOR ALCOHOL MISUSE[632]

- As part of every annual physical exam
- As part of the initial assessment in behavioral health service settings
- As part of the initial intake or admission process to older adult–focused social service programs
- When the older adult starts a new medication
- When the older adult has major stressful life changes (e.g., death of a significant other, retirement, major illness or declining health, loss of social supports)
- When potential signs and symptoms of an alcohol-related problem are present, such as sleep difficulties, falls, injuries, depression, and problems with daily living skills
- When the older adult has multiple healthcare providers or uses more than one pharmacy
- When the older adult reports that a medication is not working as well over time
- When the older adult reports a past personal or family history of substance use or mental disorders

The consensus panel recommends widespread screening of older adults for alcohol misuse and alcohol-related problems in all healthcare settings and emergency departments, where older adults are frequently seen because of accidents and falls related to alcohol use. Also screen older adults for alcohol misuse at the initial intake or assessment when admitted to social services agencies and behavioral health service programs.

Screening Tools

The Alcohol Use Disorders Identification Test (AUDIT) and the Short Michigan Alcoholism Screening Test-Geriatric Version (SMAST-G) are two common, easy-to-use, brief instruments that can successfully screen older adults for alcohol misuse and signs of AUD.[633]

AUDIT

The AUDIT is a 10-item screening instrument for heavy drinking from the World Health Organization. The AUDIT collects information about alcohol use, drinking behaviors, and alcohol-related problems over the past year.[634] It is a validated (tested and approved) measure of alcohol-related risk in people of different genders, ages, and cultures.[635] There are two versions—one given by clinicians and one that clients complete by themselves. (See the Chapter 4 Appendix for both.) A cutoff score of 8 generally indicates hazardous and harmful alcohol use. For older adults, however, a score of 5 means you should assess further.[636]

SMAST-G

Researchers at the University of Michigan developed the MAST-G, a 24-item screening instrument specifically for use with older adults. The MAST-G can be used to identify alcohol misuse in older adults.

The SMAST-G is a shorter, 10-item, validated version of MAST-G.[637] The SMAST-G does not ask about amount and frequency of alcohol use; it focuses more on the older adult's relationship to alcohol and effects of drinking. The SMAST-G is about as reliable and accurate for older adults as the AUDIT. Two or more "yes" responses indicate possible alcohol misuse.[638] (See the Chapter 4 Appendix for the SMAST-G.)

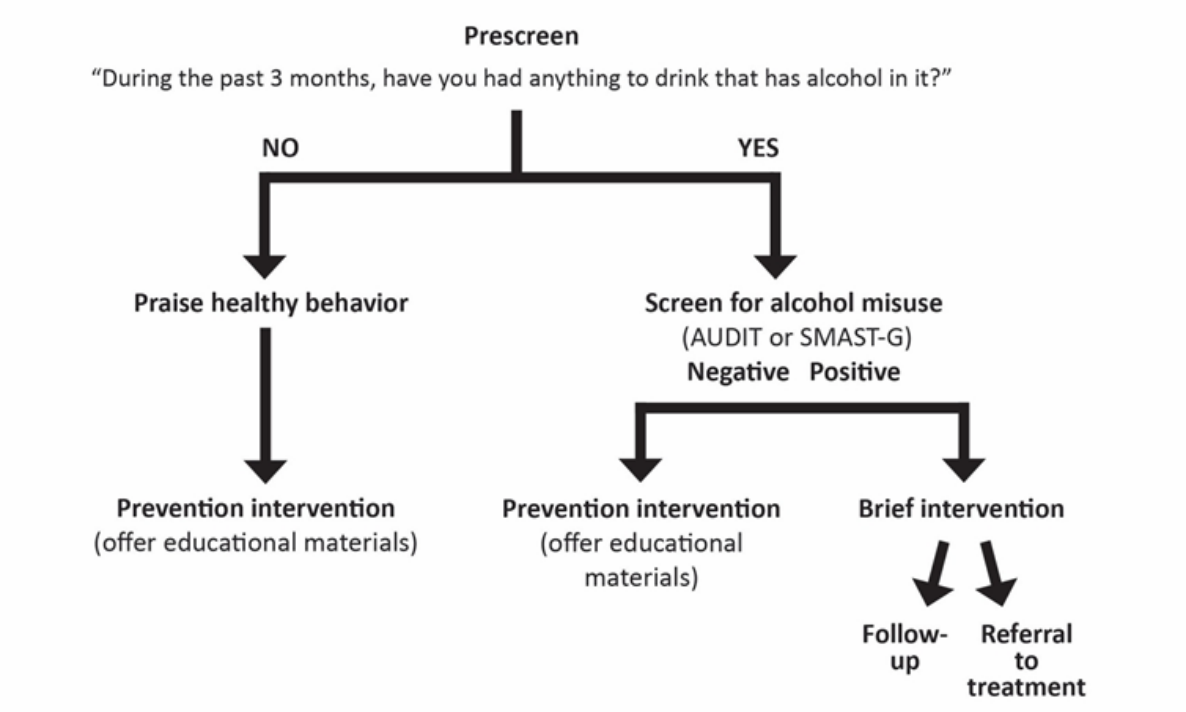
Considerations When Using AUD Screening Instruments

Although screening instruments can help you quickly identify potential alcohol misuse in older adults and offer a chance to use prevention strategies (Exhibit 4.2), they can sometimes be overly sensitive and lead to false positives.[639] Some questions on alcohol screening instruments refer to physical complaints that are often age associated. Conversely, brief screening does not always capture symptoms that may indicate AUD. **Always follow up positive screens with more questions and indepth assessment (or referral to assessment) for AUD.**

EXHIBIT 4.2. Preventing Alcohol Misuse Among Older Adults

You can support prevention efforts by helping older adults develop the knowledge, attitudes, and skills they need to make good choices about alcohol use before their drinking puts their physical and mental health at risk. The key to prevention is identifying early which older adults drink alcohol. You can often help older adults to reduce their drinking, or to seek help if their alcohol use begins to affect their health, simply by giving them information about standard drink sizes, guidelines for low-risk drinking, health risks of alcohol misuse, and health risks of mixing medication with alcohol.

Early identification and prevention begin with widespread prescreening in all healthcare and community-based senior service settings.[640] The following decision tree shows the early identification and prevention process.



Adapted from material in the public domain.[641]

Assessment and Diagnosis of AUD

It is essential that you, or another provider with sufficient qualifications, perform indepth assessments for AUD in your older adult clients. Older adults with AUD are often underdiagnosed because DSM-5 criteria do not always capture AUD in older adults. Also, some signs of AUD may be mistaken for symptoms of co-occurring medical or mental disorders or natural aging processes. **If you only use DSM-5 diagnostic criteria to diagnose AUD, you may miss many older adults with alcohol-related problems, which means they may not receive proper treatment.**[642]

A full assessment should address the client's:

- History of alcohol use.
- Age of onset of alcohol-related problems.
- Past and current amount and frequency of alcohol use (with attention to periods of binge drinking).
- Relationship between his or her drinking and daily functioning.
- Co-occurring medical conditions.
- Past attempts to limit or control alcohol intake.

- Co-occurring mental disorders, particularly depression and anxiety.
- Current medications.
- Use of alcohol to cope with sleep problems, depression, anxiety, stressful life events, or pain.

For information on how to give an indepth assessment for AUD, refer to Chapter 3 of this TIP.

Understanding DSM-5 Diagnostic Criteria Versus Alcohol-Related Risk Criteria

For an AUD diagnosis, your client must have at least 2 out of 11 symptoms listed in DSM-5. However, as noted before, some of these symptoms may not apply to older adults. Exhibit 4.3 summarizes the physical, cognitive, and social aspects of aging you should think about when using these criteria to assess and diagnose AUD in older adults.

EXHIBIT 4.3. DSM-5 Criteria for AUD and Considerations for Older Adults

DSM-5 CRITERIA FOR AUD[643]	CLINICAL CONSIDERATIONS[644,645,646,647,648]
Criterion A1	Older adults may need less alcohol to feel physical effects. Cognitive impairment can make it hard for older adults to keep track of their drinking.
Criterion A2	No special considerations for older adults.
Criterion A3	Effects of alcohol can result from drinking even small amounts, so relatively less time may be spent getting and drinking alcohol and recovering from using it.
Criterion A4	No special considerations for older adults.
Criterion A5	Older adults may have different role responsibilities because of life-stage changes, such as retirement. Role responsibilities more common in older adulthood include caregiving for a spouse or another family member, such as a grandchild.
Criterion A6	Older adults may not realize that social or interpersonal problems they are experiencing are connected to their alcohol use.
Criterion A7	Older adults may take part in fewer activities generally, making it more difficult to discover when drinking is causing them to withdraw from activities.
Criterion A8	Older adults may not understand that their alcohol use is hazardous, especially when they are drinking the same as or less than before. In addition, older adults may not realize the physical dangers of drinking in certain situations (e.g., before using a step stool).
Criterion A9	Older adults experiencing physical or psychological problems may not realize that drinking could be a factor.
Criterion A10	Changes in tolerance occur because of increased sensitivity to alcohol with age. Previously manageable quantities of alcohol may cause greater impairment.
Criterion A11	Withdrawal symptoms in older adults can last longer, be less obvious, or be mistaken for age-related illness.

DSM-5 diagnostic criteria related to physical and emotional effects (e.g., craving, desire to cut down) may be key signs of AUD in older adults.[649] When deciding whether an older individual's alcohol misuse meets DSM-5 criteria for AUD, remember older adults' lowered tolerance to alcohol and the unique aspects of withdrawal from alcohol and other sedative-hypnotic drugs, like benzodiazepines.

To diagnose AUD in older adults, use alcohol-related risk criteria in addition to DSM-5 diagnostic criteria. For example, alcohol-related risk criteria for older adults in the Comorbidity Alcohol Risk Evaluation Tool (CARET), based on the Alcohol-Related Problems Survey,[650] include:[651]

- Amount and frequency of alcohol use (e.g., drinking more than recommended guidelines).
- Brief periods of excessive drinking (e.g., binge drinking).
- Driving after drinking.
- Others being concerned about the older adult's drinking.
- Co-occurring medical and mental disorders.
- Symptoms caused or worsened by drinking (e.g., cognitive impairment).
- Medications that interact negatively with alcohol or that do not work properly if taken with alcohol.

The amount and frequency of drinking described as "at-risk" for older adults is paired with specific drinking behaviors, use of medications, and co-occurring conditions in the past 12 months. For more information about the items in the CARET and how to score them, please see Barnes et al., 2010.[652]

For example, if an older adult has chronic liver disease and drinks any alcohol or even binge drinks just once a week, he or she may not meet DSM-5 criteria for AUD. Still, his or her drinking is a risk for serious alcohol-related health consequences. **Using age-adjusted DSM-5 criteria and CARET health-related risk criteria will more accurately gauge severity of AUD** and the degree to which your client may exhibit behavioral or health-related effects of drinking that should be a focus of treatment.

In assessing and diagnosing AUD in older adults, the consensus panel recommends that you think through all aspects of health-related risk in addition to age-specific issues.

Late-Onset Alcohol Misuse and AUD

Most older adults meeting criteria or receiving treatment for AUD began drinking earlier in their lives. However, **some older adults begin to misuse alcohol later in life (called late-onset alcohol misuse or, if severe enough to meet criteria for AUD, late-onset AUD). Older adults who begin misusing alcohol late in life may not realize their increased risk for health-related harms related to drinking.** They may start misusing alcohol to cope with co-occurring medical or mental disorders, grief and isolation upon the loss of a loved one, or the stress of life changes, such as retirement.[653] Stress, role or identity loss, and approval of drinking by members of older adults' social groups are linked to an increased risk of late-onset AUD.[654]

Assessments should address risk factors related to late-life alcohol misuse among older adults (Exhibit 4.4). **Assessment is a chance for you to use education as a prevention and early intervention tool.**

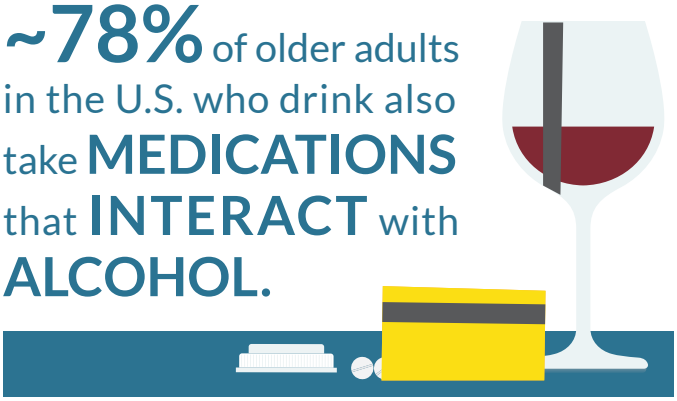


EXHIBIT 4.4. Risk Factors Related to Alcohol Misuse in Late Life[655]

Physical risk factors:

- Long-lasting pain
- Physical disabilities or problems getting around
- Changes in care or living situations
- Poor health status
- Chronic physical illness
- Multiple prescription drugs

Mental risk factors:

- Avoidance coping style (e.g., drinking to cope with stressful events)
- History of alcohol misuse
- Past or co-occurring SUDs (including tobacco use disorder)
- Past or co-occurring mental disorders

Social risk factors:

- Financial stress, including having a fixed income and having difficulty obtaining Medicare/Medicaid and other health benefits
- Bereavement
- Unexpected or forced retirement
- Social isolation

Assessing Alcohol–Drug Interactions

Alcohol–drug interactions are a major factor in the overall health risk for older adults who drink.[656] Changes in older adults' ability to absorb and metabolize alcohol and medications (i.e., higher sensitivity) can increase the risk of negative alcohol–drug interactions. Alcohol can also increase or reduce a medication's therapeutic effect and interfere with its effectiveness in treating medical illnesses commonly seen in older adults, like high blood pressure, depression, gout, and insomnia.[657]

Some older adults may also be at greater risk for negative alcohol–drug interactions because of the number and types of medications they take. Approximately 78 percent of older adults in the United States who drink also take medications that interact with alcohol.[658,659] Emergency department visits are increasing for dangerous alcohol–drug reactions in older adults.

Many classes of prescription medications can interact negatively with alcohol, including:[660]

- Antibiotics.
- Antidepressants.
- Antihistamines.
- Barbiturates.
- Benzodiazepines.
- Muscle relaxants.
- Nonopioid pain medications.
- Anti-inflammatory agents.
- Opioids.
- Anticoagulants.

Learn more about commonly used prescription and over-the-counter medications and how they interact with alcohol in NIAAA's publication *Harmful Interactions* (www.niaaa.nih.gov/publications/brochures-and-fact-sheets/harmful-interactions-mixing-alcohol-with-medicines).

RESOURCE ALERT: ALCOHOL AND DRUG INTERACTION CHECKERS

Learn more about interactions between alcohol and specific medications by using a drug interaction checker (e.g., the one available at www.drugs.com/drug_interactions.html). Check for interactions between ethanol (the type of alcohol in alcoholic beverages) and medications (prescription and over-the-counter) and dietary supplements (e.g., vitamins, herbal products).

With permission, you can also check with your client's pharmacist about alcohol–drug interactions for the specific medications your client takes.

Always learn which medications your client takes. Nonjudgmentally offer information about the ways alcohol can interfere with a medication's effectiveness and increase the risk of harmful effects.

The consensus panel recommends that you educate older adults about negative alcohol–drug interactions and work with your clients to help them reduce or abstain from alcohol use while taking these medications.

Continuum of Care

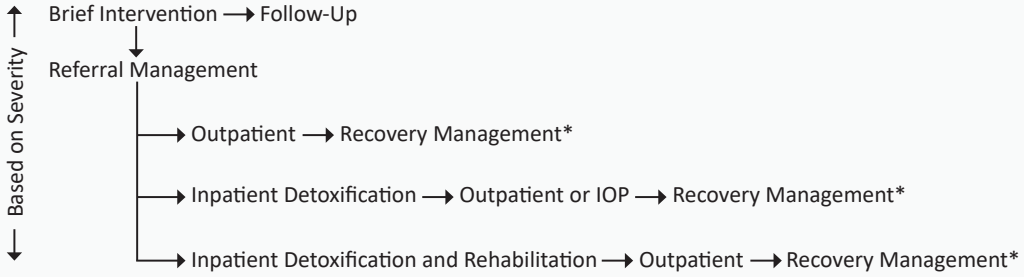
A continuum of care exists for older adults with alcohol misuse, including AUD. It ranges from least to most intensive: from brief interventions, to outpatient or intensive outpatient treatment (IOP) in programs that specialize in mental health services or SUD treatment, to inpatient detoxification and rehabilitation.

Continuing care should focus not only on achieving abstinence from or reducing alcohol use but also on improving quality of life. AUD treatment goals are like treatment goals for any other chronic condition. They include:[661]

- Respectfully helping older adults participate in treatment throughout the continuum.
- Helping them stay motivated to change risk behaviors to improve their health and quality of life throughout treatment and recovery.
- Using multiple treatments as needed, including pharmacotherapy and psychosocial interventions.
- Reducing the risk of relapse.

Apply a stepped-care approach that starts with the least intensive treatment option that meets the needs of the older adult, and then increase the level of intensity as needed. Exhibit 4.5 shows the possible treatment pathways along the continuum of care for older adults with alcohol misuse.

EXHIBIT 4.5. Continuum of Care Pathways for Older Adults



Note: Pharmacological interventions may be started at any time across the continuum of care to meet clients' needs.

*For more about recovery management, see the "Recovery Management" section of this chapter.

Treatment Approaches Suited to Older Adults

Despite common stereotypes, older adults are generally open to and accepting of alcohol treatment, especially when programs offer age-specific groups, age-sensitive treatment (i.e., treatments that meet their special needs), and providers trained in issues unique to older adults.[662,663] Older men and women who participate in alcohol treatment:[664]

- Are successful in reaching treatment goals of abstinence or risk reduction.
- Have nearly the same or better outcomes than younger adults.
- Are more likely to complete treatment than younger adults.
- Benefit greatly from age-specific treatment.

The consensus panel recommends that all treatment providers adopt the age-sensitive practices in Exhibit 4.6. (For more information on principles of care for older adults, see Chapter 2 of this TIP.)

EXHIBIT 4.6. Characteristics of Age-Sensitive Alcohol Treatment for Older Adults[665]

Regardless of the settings and modalities in which you offer treatment services to older adults, they are more likely to be open to and respond to treatment if interventions are:

- **Supportive and nonconfrontational** (e.g., forming a respectful partnership with your clients, which is the primary way to support behavior change).
- **Flexible** (e.g., supplying services at home or over the phone if clients cannot get to you).
- **Sensitive to gender differences** (e.g., addressing in AUD treatment the fact that women are more likely to be prescribed psychoactive medications than men).
- **Sensitive to cultural differences** (e.g., using print materials in your clients' primary language).
- **Sensitive to the client's level of physical and cognitive functioning** (e.g., using shorter sessions; meeting in a room close to the building entrance; giving information in multiple formats, like verbally and in writing).
- **Holistic and thorough** (e.g., addressing cognitive, physical, social, mental, financial, emotional, and spiritual factors that may inhibit treatment engagement or enhance recovery).
- **Focused on helping older adults develop and improve coping and social skills** (i.e., instead of focusing on internal mental processes, using treatment that focuses on behavioral change to reduce their alcohol-related risk and increase quality of life, such as developing problem-solving strategies to manage triggers for drinking and strengthening social connections with nondrinking friends or members of mutual-help groups).

Brief Interventions for Alcohol Misuse

Brief interventions can support AUD prevention and risk reduction (e.g., helping clients to reduce or abstain from drinking to decrease health-related risks). Brief intervention also can be a starting point for entry into more intensive AUD treatment. (See Chapter 3 of this TIP for more information.) Older adults are likely to participate in and accept this approach to addressing alcohol misuse.[666,667,668]

Brief interventions are a good fit for many different treatment settings, including primary care, emergency departments, older adult-focused social service settings, and outpatient behavioral health service programs. **They are cost effective, low intensity,[669,670] and efficient,** generally consisting of one to four sessions that last from 15 to 60 minutes.[671,672] Brief interventions may include:

- Referral as needed to medical specialists.
- Inpatient/outpatient addiction-specific treatment.
- Older adult–focused social services.
- Community-based mutual help and recovery support groups, such as AA.

RESOURCE ALERT: SCREENING AND BRIEF INTERVENTIONS FOR OLDER ADULTS

See SAMHSA's *A Guide to Preventing Older Adult Alcohol and Psychoactive Medication Misuse/Abuse: Screening and Brief Interventions* at www.ncoa.org/wp-content/uploads/SBIRT-Older-Adult-Manual-Final.pdf for more information about prevention strategies and brief interventions. You can use the guide's "Health Promotion Workbook" (included as an appendix) when conducting brief interventions for alcohol misuse.

Motivational Interviewing

Motivational interviewing (MI) strategies are a cornerstone of brief interventions for alcohol misuse. You can combine these strategies with longer therapeutic approaches to treat AUD in older adults.[673] MI can help people of many different ages and ethnic, racial, and cultural backgrounds participate in treatment. MI is flexible and focuses on empathetic, reflective listening and a respectful, client-centered approach.[674] MI strategies may be particularly useful with older adults who may not be aware of the health risks related to their alcohol use. Because MI is a nonjudgmental and nonconfrontational approach, it may also be useful with clients who have mixed feelings about changing their drinking.

MI can help older adults change risk behaviors, such as reducing or abstaining from alcohol use.[675,676,677] However, not many studies have looked at MI's usefulness in getting older adults to reduce or stop alcohol use. Some of the ways in which MI affects behavior change may be different for older adults than for younger adults.[678]

KEY ASPECTS OF MI

- Being willing to collaborate with the client
- Being accepting and nonjudgmental
- Offering compassionate and empathetic responses to client concerns
- Asking clients about their concerns and goals for treatment instead of forcing your own agenda for change on them[679]

The mnemonic "FRAMES" outlines the most common MI strategies used in brief interventions to address alcohol misuse:

- **F: Give specific and nonjudgmental, objective Feedback to your clients about their drinking,** including information about health risk and potential effects. This feedback is often based on results of alcohol misuse screening instruments.
- **R: Point out to your clients their personal Responsibility for change** and emphasize that it is up to them to decide what, if anything, to change about their drinking. Responsibility for change also means respecting your clients' independence and decisions about behavior change.
- **A: Give clear Advice and recommendations to your clients about changing their drinking.** In the spirit of a client-centered approach, ask permission to give advice, and then ask your clients about their understanding of the recommendations you offered.
- **M: Offer a Menu of options for changing drinking behaviors** if your clients choose to change. Options may include altering drinking behaviors, abstaining, or accepting referral to more intensive mental health services or addiction-specific treatment.
- **E: Use an Empathetic communication style** that is respectful, supportive, and focused on listening to your clients' views and concerns about their drinking.
- **S: Support Self-efficacy** by recognizing clients' knowledge about and ability to change behaviors in support of their health and well-being, including changing drinking behaviors.[680,681]

MI generally focuses on:[682]

- Helping clients deal with any mixed feelings they may have about changing their drinking.
- Asking clients about their own reasons for change.
- Having a respectful and joint conversation about behavior change based on clients' stated goals.

Exhibit 4.7 shows a brief intervention developed specifically for older adults that builds on the FRAMES model and uses MI strategies, such as discussing the client's reasons to reduce or quit drinking and summarizing the discussion at the session's end.

EXHIBIT 4.7. Brief Alcohol Intervention Parts for Older Adults[683]

After you find that an older adult is misusing alcohol, use a semistructured brief intervention, including the following steps:

1. Ask the client about future goals for health, activities, hobbies, relationships, and financial stability.
2. Adapt your feedback based on the client's responses to screening questions relating to drinking patterns and other health habits (which may also include smoking, nutrition, and tobacco use).
3. Discuss how the client's drinking compares with that of others in his or her age group; review definitions of standard drinks (one standard drink equals 12 ounces of beer or ale, one 1.5 ounce shot of distilled spirits, 5 ounces of wine, 3–4 ounces of sherry, or 2–3 ounces of liqueur[684]).
4. Discuss the "pros and cons" of drinking if appropriate. Doing so can help you understand the role of alcohol in the older adult's life, including its role in coping with loss and loneliness, without influencing the client to move toward any specific change.
5. Give information about the effects of heavier drinking in a nonjudgmental way. Some older adults may have problems in physical, mental, or social abilities despite drinking within recommended limits.
6. Discuss the client's reasons to cut down or quit drinking. Staying independent, having good physical health, and keeping mental abilities can be key motivators in this age group.
7. Offer information about drinking limits and ways to cut down or quit (e.g., participating in social activities that do not involve alcohol, taking up hobbies and interests from earlier in life, finding volunteer activities).
8. Create a drinking agreement. Agreed-upon drinking limits that are signed by the client and the provider are particularly helpful in changing drinking patterns.
9. Discuss ways to cope with risky situations when the client may feel tempted to drink beyond agreed-upon limits. Social isolation, boredom, and negative family interactions can be problems in this age group.
10. Summarize the session.

If clients are already motivated to change their drinking, exploring their mixed feelings can accidentally lead to "sustain talk" (i.e., talk about reasons for not changing) instead of "change talk" (i.e., talk about reasons for changing). Sustain talk can keep clients from making improvements. You should assess clients' readiness to change at the beginning of a brief intervention. **If clients appear ready to make changes, urge them to talk more about the positive reasons for changing their alcohol use instead of focusing on the "pros and cons" of changing.**[685,686,687,688]

Treatment of Co-Occurring Conditions and Disorders

Co-occurring medical conditions and mental disorders can contribute to or worsen AUD. They can also complicate treatment of AUD in older adults. These conditions should be addressed at the same time as AUD, either by the same provider or provider team or through active referral to and care coordination with other medical or behavioral health services.[689] Factors that will help you decide how to address co-occurring conditions include:[690]

- The severity and duration of AUD and any co-occurring conditions.
- Client preference.
- Availability of services in the community.
- The availability of care coordination among different providers.

You can address co-occurring health conditions and mental disorders in older adults by:

- **Helping clients who do not have a primary healthcare provider find one,** and referring them to healthcare for an indepth physical, including screening and assessment for:
  - High blood pressure.
  - Liver disease.
  - Osteoporosis.
  - Sleep disorders.
  - Cancer.
  - Diabetes.
  - Heart disease.
- **Screening for cognitive impairment** and, if needed, referring for an indepth geriatric assessment. (See Chapter 6 of this TIP for more information.)
- **Providing emotional support and behavioral interventions** instead of standard CBT for older adults with cognitive impairments.[691]
- **Assessing for other SUDs,** including tobacco use disorder and opioid use disorder.
- **Giving clients treatment and intervention options for tobacco use disorder, pain management, and sleeping difficulties** (e.g., CBT, relaxation training, exercise, physical therapy).[692] Options should be scientifically supported and nonpharmacological whenever possible.
- **Screening, assessing, and treating mental disorders** (including depression and anxiety) within the scope of your practice, or referring to mental health services.
- **Referring for pharmacotherapy for SUDs or mental disorders as needed** to a medical provider trained in older adult care.
- **Addressing mental disorders** in age-sensitive/age-specific co-occurring treatment programs.
- **Following up with other providers regularly and keeping track of clients' treatment progress together with the clients.** (See the "Referral Management and Care Coordination" section.)

The consensus panel recommends that you treat co-occurring medical conditions and mental disorders among older adults while you treat the AUD.

Referral Management and Care Coordination

The keys to positive outcomes in a stepped-care approach are effective management of referrals to the right level of treatment and ongoing coordination of care. You can adapt to many different settings the following strategies for referral management and care coordination for older adults:

- **Identify a provider** (e.g., nurse manager, case manager, social worker) in your organization who can help older adults with referral and follow-up after referral. This provider should be knowledgeable of older adults' needs and of age-sensitive/age-specific resources in the community.
- **Identify and develop linkages** to age-appropriate medical, mental health, addiction treatment, recovery support, and social service resources and programs in your community.[693] In areas where no age-specific treatment is available, work with programs to offer such services.

- **Gather information** about programs' eligibility criteria, treatment length, type of treatment, philosophy, and continuing-care options so you can match clients to the right program.[694]
- **Keep an updated referral list** of contacts and phone numbers of treatment resources. Keep on hand current information on services offered, cost, schedule, and accessibility.[695] Contact key individuals in that organization, and maintain an ongoing relationship with them.
- **Match the referral to treatment** with your clients' stated goals, treatment needs, problem severity and available resources.
- **Include family members and caregivers** in conversations about treatment planning, with clients' permission.
- **Address your clients' hopes for treatment** by:
  - Describing the type of program to which you are referring clients.
  - Asking and responding to any questions they may have.
  - Acknowledging their worries through reflective listening.
  - Clearing up incorrect beliefs with information about treatment and its usefulness.
  - Offering hope by describing other older adults' positive outcomes with AUD treatment.
- **Address clients' concerns** about confidentiality, and get all necessary paperwork signed so you can communicate with other providers while your clients are in treatment.
- **Offer a "warm handoff"** (i.e., introduce clients directly) to the care coordinator or behavioral health service provider in your integrated care organization.
- **Be prepared to take on the responsibility** of managing the referral and coordinating care if you are not part of an integrated care team.[696]
- **Follow up** with clients to make sure referral was successful or to make another referral if needed.[697]
- **Keep track of clients' progress** in treatment; work closely with other providers to offer ongoing care as needed.

Higher Intensity Treatment Approaches for AUD

Several scientifically supported approaches to AUD treatment are a good fit for older adults in outpatient, intensive outpatient, or inpatient residential settings. Treatment approaches that work best for older adults with AUD who need more intensive treatment than a brief intervention include CBT, TSF, pharmacological interventions, and inpatient AUD treatment tailored to older adults.

CBT for Older Adults

CBT is a well-established and scientifically supported approach for treating AUD as well as co-occurring conditions often present in older adults, such as depression, anxiety, pain, insomnia, physical disability, and other SUDs.[698,699,700] CBT includes both cognitive and behavioral interventions applied separately or together. CBT is effective for individual and group sessions. **Its flexibility and adaptability are pluses for treating the complex medical and mental health concerns of older adults.**[701] Although CBT can be adapted to healthcare, outpatient, inpatient, and residential settings in which SUD treatment is available, older adults may have better outcomes with CBT in outpatient settings.[702]

CBT for AUD focuses on helping clients find and change thoughts, feelings, and behaviors that lead to alcohol misuse. CBT assumes that thoughts and feelings that occur before drinking behaviors take place are set in motion by situations or cues (e.g., attending a wedding where alcohol is served, smelling a favorite alcoholic beverage). In CBT, the client learns to identify these thoughts, feelings, and cues and then applies skills and coping methods to manage them.[703]

Strong evidence supports CBT's usefulness in helping a wide range of client populations and ages, including older adults, reduce alcohol misuse and support and continue abstinence.[704] For older adults with memory problems, CBT provides a structured and educational approach.[705] Treatment programs using CBT report improved

drinking outcomes for older veterans with significant co-occurring medical, mental health, and social problems and for women with late-life onset of heavy drinking.[706]

Given common age-related cognitive changes, CBT can be useful with older adults when you:[707]

- Make sure the older adult remembers the information and skills learned in counseling sessions.
- **Summarize and repeat information,** cognitive and behavioral change strategy steps, and the client's new awareness and insights several times throughout and at the end of each session.
- **Urge the older adult to take notes on key points** of the session, or you can take notes and give a copy to the client at the end of the session. Once permission is obtained from the client, you may want to arrange for a family member or significant person to attend and learn information and skills.
- **Offer handouts, forms, and reminder calls** to increase the chances that the older client will complete between-session assignments and tasks.

Skills-based approaches, relapse prevention, and PST are CBT adaptations that have been used successfully in the treatment of AUD among older adults.

Skills-based approaches and relapse prevention

Skills-based approaches may work well with older adults. Skills-based interventions focus on reducing health-related risks for alcohol use and continuing abstinence if the client decides that abstinence is the goal. The most commonly used skills-based approaches in AUD treatment that can be adapted for use with older adults are social skills training and coping skills training.

Social skills training helps older adults grow or improve social networks to decrease the effects of substance use, loneliness, and depression in their lives. Social skills training helps clients keep existing or create new social networks that support reduced drinking or abstinence. A key element for clients with AUD is learning skills for turning down drinks when in social situations.

Coping skills training helps older adults learn about and avoid or manage high-stress or high-risk situations they used to cope with by drinking. Key elements of coping skills training adapted for older adults with AUD are learning the ABCs (antecedents, behaviors, and consequences) of alcohol use, breaking down this chain of events, then identifying and practicing other ways of coping in high-risk situations.[708,709] Exhibit 4.8 depicts an example of an AUD behavioral chain for a 72-year-old woman.

EXHIBIT 4.8. Drinking Behavioral Chain of Events

This chain of events is for a 72-year-old woman who recently lost her spouse. She is having trouble sleeping.

Adapted from material in the public domain.[710]

RPT combines social skills and coping skills training into a structured program that can be used in group or individual treatment. One 16-week group treatment approach designed for older adults includes the following structured sections that can be repeated as needed:[711]

- Identifying individual-specific behavioral chains for drinking
- Managing social pressures to drink
- Developing coping strategies for being home and alone
- Coping with negative thoughts and emotions related to drinking (e.g., anxiety, anger, depression, loneliness)
- Managing cues that lead to drinking (e.g., seeing a beer commercial on television)
- Coping with urges to drink
- Preventing a return to drinking after a period of abstinence (also known as a "slip") from becoming a full return to past levels of alcohol use and negative effects

PST

Older adults face many everyday stressors, including chronic medical illnesses and cognitive and physical limitations. PST is a simple approach that older adults can learn easily, including those who have mild cognitive impairment.[712] PST assumes that finding the best solution to everyday problems reduces stress. Reducing stress improves people's functioning and well-being. Teaching people problem-solving skills helps them identify and apply solutions to current and future problems of living.[713]

PST includes the following steps:

- **Identify the client's view of the problem** (i.e., a positive or negative view of the problem or of the possibility of identifying solutions).
- **Define the problem** in specific terms.
- Brainstorm possible solutions to the problem.
- Review the possible solutions.
- **Select the best** possible solution.
- **Use the chosen solution,** and track whether it is useful.
- **Adjust the solution,** if needed, and then use and review the new solution.[714]

PST is widely used in many settings, including healthcare settings, outpatient addiction treatment, and home care. It is useful across age groups, including older adults, and across many mental disorders.[715]

MINING THE WISDOM OF AGE AND LIVED EXPERIENCE

When you work with older adults, remember that they have a great deal of wisdom from their life experience. This experience is like gold; mine it to help them solve their current problems. After you help clients define a problem, ask, "How have you dealt with a similar challenge in the past?" or "What are some of the ways you solved similar problems in your life?" Talking with older adults about their skills and abilities empowers them and is a respectful and supportive way to help them recognize their own knowledge and wisdom.

TSF

Twelve-Step recovery support groups such as AA, as well as other mutual-help groups, can deliver positive outcomes for people with AUD. Such outcomes including a greater likelihood of stopping alcohol use, improved psychosocial functioning, and greater levels of self-efficacy.[716] Factors related to these improved outcomes include:

- Participating in 12-Step meetings held at the treatment facility.
- Attending 12-Step meetings while participating in outpatient or inpatient addiction treatment.
- Attending and actively participating in 12-Step meetings consistently, early in the recovery process, and frequently (e.g., three or more meetings per week).
- Participating in other 12-Step group activities (e.g., doing service at meetings, reading 12-Step literature, doing "step work," getting a sponsor, calling other AA members for support).[717]
- Creating nondrinking social networks.[718]
- Increasing spirituality and participating in spiritual practices like prayer and meditation.[719,720]

TSF therapy is a structured therapeutic approach that links people to, and helps them stick with, community-based 12-Step recovery support groups. TSF interventions range from 4 to 12 sessions of individual or group treatment in inpatient or outpatient settings. During sessions, the provider:

- Explores different 12-Step themes (e.g., powerlessness, personal responsibility, spirituality).
- Explores the client's attitudes about those themes and other aspects of 12-Step support groups.
- Identifies solutions to barriers hindering the client's active participation in 12-Step support groups.

Some evidence exists that TSF therapy is effective with older adults and, like CBT, gives support, structure, goal direction, and opportunities for older adults to develop positive coping skills and a social network that values abstinence and a recovery focus.[721]

RESOURCE ALERT: TSF THERAPY MANUAL

The *Twelve Step Facilitation Therapy Manual*—found at https://pubs.niaaa.nih.gov/publications/projectmatch/match01.pdf—was designed to standardize TSF therapy as a 12-session treatment approach for the original Project MATCH multisite clinical research trial. The manual, published by NIAAA, offers an overview of Project MATCH and the trial's standardized TSF modules. The TSF manual is the basis for other types and adaptations of TSF interventions. **Adapt the confrontational interventions described in this manual for older adults, who respond better to and are more accepting of nonconfrontational approaches.**

Pharmacological Interventions

Options for pharmacological interventions to treat AUD are more limited for older than younger adults.[722] Although these medications may work well and be safe for older adults, the risk of negative reactions is higher because older adults are more likely to have co-occurring medical problems, take multiple medications, and have a decreased ability to eliminate medications given age-related changes in liver and kidney functions.[723,724]

To avoid harmful drug–drug interactions, prescribers must review all medications an older adult uses before giving a new prescription to treat AUD and consider a lower dose of the AUD medication when appropriate.

Three medications are approved by the Food and Drug Administration to treat AUD, but clinicians should note for each of these the effectiveness and safety profile in older adults specifically. Furthermore, **none of these medications have been studied across numerous long-term, randomized, controlled trials of older populations.[725]** This limits understanding of their true benefits and drawbacks to older clients. Nonetheless, potential pharmacologic options and some of their considerations include:

- **Acamprosate,** which reduces symptoms of protracted withdrawal from alcohol, such as sleep and mood problems, by altering brain changes related to alcohol use.[726] It can also reduce craving and the pleasurable effects of alcohol.[727,728] Not enough research exists on the efficacy and safety of acamprosate in older adults. Because it is removed from the body through the kidneys, healthcare providers should first evaluate and then monitor renal function in older clients.[729,730]
- **Naltrexone,** which reduces craving and the pleasurable effects of alcohol.[731] It comes in an oral formulation that is taken daily or an injectable formulation that requires a monthly visit to a healthcare provider. A very small number of studies suggest that naltrexone may be tolerable in adults ages 50 and older, but widespread data on its tolerability in older aged

individuals are missing.[732] Prescribers should consider the following:

- Naltrexone is removed from the body through the liver and should be used cautiously in older adults with possible liver problems.[733]
- Naltrexone blocks the effects of opioids used to treat chronic pain, which is common in older adults.[734] A client who begins naltrexone treatment while still taking opioids can suffer acute opioid withdrawal serious enough to require hospitalization.[735,736] Ask older adults about their use of opioid pain medication before starting naltrexone treatment. (See SAMHSA's TIP 63, *Medications for Opioid Use Disorder* [https://store.samhsa.gov/product/TIP-63-Medications-for-Opioid-Use-Disorder-Full-Document/PEP20-02-01-006], for more information about naltrexone.)
- Naltrexone can trigger symptoms of major depression, including suicidal ideation.[737] Closely watch older adults with a history of depression who take naltrexone.[738]
- Although naltrexone's potential side effects are relatively benign (e.g., dizziness, nausea, reduced appetite, increased daytime sleepiness), they can be significant in older adults.[739] Clinicians should monitor older clients appropriately.

- **Disulfiram,** which triggers an acute physical reaction to alcohol, including flushing, fast heartbeat, nausea, chest pain, dizziness, and changes in blood pressure. It is prescribed to motivate people to abstain from alcohol. Because these effects can be harmful to older people, disulfiram is generally not recommended for use with older adults and, if used, is done so only with great caution.[740,741] Physicians and other providers must closely monitor older clients taking disulfiram for the occurrence of these effects. Additionally, family/caregivers may need to supervise older adults taking disulfiram to make sure they take it correctly and do not take it while continuing to use alcohol, which can lead to serious complications.[742]

RESOURCE ALERT: MEDICATIONS FOR AUD

For more information about medications for AUD, including dosing considerations for older adults, see SAMHSA's *Medication for the Treatment of Alcohol Use Disorder: A Brief Guide* (https://store.samhsa.gov/product/Medication-for-the-Treatment-of-Alcohol-Use-Disorder-A-Brief-Guide/SMA15-4907).

Medical Management Counseling

Older adults with AUD who have no access to addiction-specific treatment and do not need medically supervised withdrawal can get treatment in general healthcare settings with pharmacological interventions and brief treatment. Medical management counseling for this approach includes:

- Providing feedback on lab tests that show potential drinking-related health issues. This feedback can help increase motivation to change drinking habits.
- **Recommending abstinence as the safest course** while supporting movement toward that goal.
- Frequently checking that the older adult is taking his or her medication as prescribed, then reducing the frequency of visits after an appropriate period of abstinence.
- **Actively linking the older adult to supports,** such as to AA or other mutual-help and recovery support groups (see the "Recovery Support Groups" section) that welcome older adults.
- Urging and supporting active participation in recovery activities.

Brief medical management counseling and following clients to make sure they take AUD medications as prescribed can help individuals with AUD stop drinking and remain alcohol free.[743]

The consensus panel recommends using medications to treat AUD in older adults when necessary. Key parts of pharmacotherapy for older adults include:

- Carefully reviewing potentially harmful drug–drug interactions.
- Using lower doses of medications.
- Following up with clients and making sure they take medications as prescribed.
- Linking clients to recovery supports.

Inpatient AUD Treatment for Older Adults

Inpatient treatment can be a good fit for older adults who:

- Meet criteria for AUD.
- Have co-occurring health and mental health concerns.
- Need medically supervised withdrawal.
- Chose abstinence as their primary treatment goal.

Inpatient treatment may be limited to medically supervised withdrawal followed by active referral and immediate start of outpatient or IOP specialty treatment or can include a longer residential stay for an indepth recovery-oriented rehabilitation program.[744] **All inpatient treatment programs should use age-sensitive practices for older adults** (Exhibit 4.6).

Medically supervised withdrawal

Alcohol withdrawal symptoms in older adults can differ in severity, may occur 7 days or longer after the last drink, and are more likely to happen in people who have had withdrawal symptoms in the past.[745] Detoxification, also known as medically supervised withdrawal, should **consider the unique aspects of alcohol withdrawal in older adults:**

- **Older adults are more likely to have delirium** (i.e., rapid onset of a confused mental state) during withdrawal, which may be mistaken for early signs of dementia.[746]
- Typical withdrawal symptoms may be less obvious yet last longer in older adults.[747] Typical withdrawal symptoms include:
  - Autonomic hyperactivity (e.g., increased pulse rate, blood pressure, and temperature).
  - Restlessness.
  - Sleep problems.
  - Anxiety.
  - Nausea.
  - Tremor (shaking/shivering).
- **Withdrawal may worsen other medical issues** (e.g., heart disease, diabetes) and mental disorders (e.g., depression, anxiety) in older adults.[748]
- **Older adults are at greater risk than younger adults for alcohol withdrawal-related medical and neurological problems.** This is because older adults have higher rates of co-occurring physical and mental disorders and cognitive impairments and an increased sensitivity to medications used to treat withdrawal symptoms (e.g., benzodiazepines).[749] Watch older adults closely for signs of delirium or seizures during withdrawal.

Older adults may be at greater risk for harmful drug events during medically supervised withdrawal if they are taking medications to treat other medical conditions. Conduct an indepth assessment and continue to follow clients to learn:

- Which medications are being taken for other medical conditions.
- The client's risk of falls while being treated with common medications for managing withdrawal symptoms (e.g., benzodiazepines).
- Which co-occurring medical conditions are present (e.g., heart disease, breathing problems, diabetes, cognitive impairment). See Chapter 6 for more information about assessing cognitive impairment in older adults.

RESOURCE ALERT: TIP 45, *DETOXIFICATION AND SUBSTANCE ABUSE TREATMENT*

SAMHSA's TIP 45 offers guidance for medically supervised alcohol withdrawal and additional information about older adults (https://store.samhsa.gov/product/TIP-45-Detoxification-and-Substance-Abuse-Treatment/SMA15-4131).

To reduce the risk of complicated withdrawal, older adults should complete medically supervised withdrawal in a medically supervised inpatient facility.[750] The revised Clinical Institute Withdrawal Assessment of Alcohol Scale–Revised (CIWA-Ar) is an objective measure of alcohol withdrawal and shows the use and dosage of medications (e.g., short-acting benzodiazepines) to ease withdrawal symptoms. See "Resource Alert: Clinical Institute Withdrawal Assessment of Alcohol Scale–Revised (CIWA-Ar)." However, the CIWA-Ar may not be as accurate for older adults with co-occurring medical conditions that hide or increase withdrawal symptoms.[751] Treatment during withdrawal should be based on your knowledge of the unique physiology of older adults, clinical judgment, and close tracking of clients.

RESOURCE ALERT: CLINICAL INSTITUTE WITHDRAWAL ASSESSMENT OF ALCOHOL SCALE–REVISED (CIWA Ar)

The CIWA-Ar is available for download at https://umem.org/files/uploads/1104212257_CIWA-Ar.pdf.

Age-specific treatment

Age-specific treatment for older adults helps support clients in seeking, entering, and staying in treatment. It also improves their treatment experience.[752] Whereas some older adults benefit from mixed-age treatment, other older adults are more likely to benefit from age-specific treatment, such as those with more chronic co-occurring health conditions and problems with functioning, and those ages 75 and older.[753] Research shows positive outcomes; for instance, **60 percent to 85 percent of older adults who participated in age-specific inpatient treatment programs were still abstinent 12 months after leaving treatment.**[754] These programs offered:[755]

- Individual and group therapy and community activities.
- Adaptations for older adults (e.g., slower pace; adaptations for vision, hearing and cognitive needs).
- Special topic groups for older adults that focused on grief, loss, isolation, physical health issues, recreation, and life changes.
- A nonconfrontational therapeutic approach highlighting the therapeutic alliance while using CBT, MI, and a 12-Step philosophy.

PARTS OF A SUCCESSFUL INPATIENT REHABILITATION PROGRAM FOR OLDER ADULTS

Positive outcomes have been achieved by inpatient SUD rehabilitation programs for older adults that use:

- Nonconfrontational group therapy for grief, denial, anger, shame, age-related loss, and loneliness.
- CBT and dialectical behavioral therapy (DBT) focusing on:
  - Teaching clients how to manage distress, how to control emotions, and how to improve relationship skills.
  - Allowing people to rebuild social-support networks.
  - Using self-awareness to deal with grief, loneliness, and depression.
- Medical and mental health services, including 24-hour access to nursing care.
- Personal care aides, if needed.
- Health and wellness activities, including:
  - Massage.
  - Acupuncture.
  - Hydrotherapy.
  - Movement therapy.
  - Meditation.
  - Mindfulness practice.
- Family involvement in treatment.
- Active links to medical, social, and case management services.

Recovery Management

Per SAMHSA, recovery is "a process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential."[756] Recovery management is an organizing philosophy for addiction treatment and recovery support services to help individuals and family members achieve and continue long-term addiction recovery. **Not everyone who misuses alcohol needs ongoing recovery management support, but some older adults may benefit from ongoing tracking and recovery support,** including those with:[757]

- Co-occurring medical conditions or mental disorders.
- Social isolation.
- Little support from family and friends.

Recovery support for older adults who misuse alcohol can begin after a brief intervention in a healthcare setting or while the older adult is in mental disorder or AUD treatment (Exhibit 4.5). However, ongoing recovery management is most like the continuing care approach to addiction treatment and to the philosophy of ongoing illness management in the treatment of chronic medical illnesses like diabetes. In the addiction treatment research, some of the continuing care interventions that work well for older adults and show positive effects include:[758]

- Home visits.
- Telephone counseling.
- Recovery checkups.
- Linkages to community resources, such as recovery support groups.

In addition, using case management services and helping supportive family members participate in the older adult's treatment can support ongoing recovery.

Case and Care Management Services

Case and care management (CCM) services focus on helping older adults reduce the health-related risks of alcohol misuse and enter addiction-specific treatment when necessary. CCM models can be particularly helpful to older adults who are isolated, because the CCM provider can offer services:

- In the client's home.
- By phone.
- Through videoconferencing.
- At the healthcare provider's office.
- In community-based social service settings.
- In residential or long-term care facilities.

For older adults, whose social networks tend to get smaller with age, CCM strategies should focus on connecting them to age-related resources in the community that support recovery. The CCM provider helps clients access medical, mental health, social, financial, education, work-related, and other community-based services. Nurse care managers, social workers, addiction treatment or mental health counselors, or peer recovery supporters can offer CCM. CCM services often lead to positive outcomes for older adults with AUD or co-occurring medical conditions or mental disorders.[759]

CCM models may be particularly good at supporting and keeping older adults in treatment and offering a complete approach to addressing the needs of older adults with complex medical and mental health issues. CCM services are part of a comprehensive approach. They focus on overall health improvement, which is a common goal among older adults, rather than just addressing AUD (which may feel uncomfortable or shameful to older adults).[760] Program reviews of CCM approaches support case management as a key part of a long-term recovery management approach for older adults with AUD.[761]

Caregiver Involvement

Involving caregivers throughout treatment and ongoing recovery can help improve an individual's chances of staying in AUD treatment. It can also improve AUD treatment outcomes.[762] However, the client must give permission for you to involve others in their treatment. Issues of confidentiality and protection of dignity are highly important. You should know whom the older adult trusts or prefers for support. Caregivers may include a spouse or partner, adult children,

siblings, or extended family members, friends, or neighbors. Caregivers may be family members or individuals significant to the older adult who might be involved in the older adult's health decisions.

Caregivers:

- Often make the first contact with treatment services and should be involved in the initial assessment of the older adult (with the older adult's permission).
- Often supply strong motivation for the older adult to enter treatment.
- Can also offer important details about the older adult's drinking history and health-related risks related to current alcohol use.
- Should also be involved throughout treatment, including during development of a posttreatment recovery plan for the older adult and ongoing recovery support.

Ways to involve a caregiver in AUD treatment include helping the caregiver:

- Develop contingency contracts for specific AUD behaviors (e.g., taking AUD treatment medication, attending mutual help and recovery support groups, effects of returning to drinking).[763]
- Improve daily interactions and reinforce positive communication.
- Find caregiver education groups where caregivers learn and share with others.
- Develop and engage in shared recreational activities as alternatives to drinking.
- Reinforce positive change (e.g., praising steps to reduce or stop alcohol use).
- Develop constructive problem-solving skills (e.g., how to identify relapse triggers and respond with coping skills or strategies to prevent relapse, how to reengage with the recovery plan).
- Respond more effectively to the older adult's drinking (e.g., make sure the older adult is safe, then follow through with the consequences agreed to in the contingency contract instead of arguing or judging; encourage reengagement with the recovery plan and return to treatment if needed).

RESOURCE ALERT: HOW TO TALK TO AN OLDER PERSON WHO HAS A PROBLEM WITH ALCOHOL OR MEDICATIONS

This easy-to-read online article for family members and concerned others offers information about how to identify signs that the older adult may be misusing alcohol, how to talk with the older adult in a nonconfrontational way, and how to get help (www.hazeldenbettyford.org/articles/how-to-talk-to-an-older-person-who-has-a-problem-with-alcohol-or-medications).

A legal guardian (who may or may not be a family member) should participate in the treatment and recovery process for an older adult with cognitive impairment who cannot manage his or her own affairs. When a guardian has the healthcare power of attorney, the guardian should sign releases to speak with all providers involved in the older adult's treatment.

Addressing Caregiver Needs

Family members and others significant to older adults with AUD often take on the role of caregivers and case managers, particularly when co-occurring chronic medical conditions (e.g., diabetes) or mental/neurocognitive disorders (e.g., depression, dementia) are involved. Caregivers often get left out of treatment decisions and recovery planning, despite their commitment to and important role in the care and ongoing health management of these older adults.[764]

Because of the stress of this responsibility and lack of support, caregivers can develop health-risk behaviors, such as sleep disorders, poor diet, smoking, alcohol use, and substance misuse. Caregivers may ignore their own care, which may worsen their own chronic medical conditions or increase their risk of stress-related illnesses.[765] **You can help address caregivers' needs by:**[766]

- Identifying primary caregivers by reviewing clients' medical records.[767] Make sure all necessary paperwork is signed to allow family members and other providers to speak with one another.

- Involving them in the treatment and recovery planning process.
- Asking them about their own use of alcohol and other substances and history of mental disorders.
- Screening, assessing, and referring them to treatment for SUDs or mental disorders as needed.
- Supporting their use of healthy self-care activities, such as:
  - Getting enough sleep.
  - Eating a healthy diet.
  - Quitting smoking.
  - Exercising moderately.
  - Getting an annual physical with their primary care provider.
  - Reducing or avoiding alcohol use.
- Reminding them to ask for help from other family, friends, community members, or social service agency representatives who may be able to offer respite care.
- Exploring available caregiver supports in the community, such as the local Area Agency on Aging. (See "Resource Alert: Community-Based Supports for Caregivers.")
- Urging them to participate in mutual-help groups (e.g., Al-Anon, caregiver support groups).
- Reminding them to take breaks from the caregiver role.
- Pointing out that they are still the relative, spouse, or partner of the older adult, and that relationship has meaning and can still give them satisfaction.

RESOURCE ALERT: COMMUNITY BASED SUPPORTS FOR CAREGIVERS

For more information on **Al-Anon family groups** and finding local/online meetings, go to https://al-anon.org.

For more information about local and online **caregiver support groups** for family members of older adults with dementia, go to www.alz.org/events/event_search?etid=2&cid=0.

Recovery Support Groups

Older adults who have social supports that reinforce abstinence from alcohol have better outcomes in long-term AUD recovery than older adults without those social supports.[768] Two key factors for older adults in continuing recovery over time are having people in their lives who support their recovery and not having people in their social networks who encourage or enable alcohol use.[769]

> A key factor in long-term recovery for older adults is **not** having people in their social networks who encourage alcohol use.

Community-based recovery support groups highlight the importance of developing social relationships that support recovery rather than drinking.[770] Although a growing range and number of recovery support groups are available to adults who have AUD, **AA and SMART Recovery are widely available and may be the most useful supports for older adults.**

AA

AA is the most well known and widely available recovery support group for older adults with AUD. It offers a community-based, long-term recovery management approach to treating AUD. AA meetings and activities following treatment can be cost-effective sources of ongoing social support.[771] Key elements of AA especially well suited to older adults include:[772,773]

- Decreasing social ties that support drinking.
- Increasing social ties that support abstinence.
- Providing social support, goal direction, and structure.
- Offering opportunities to participate in substance-free social activities.
- Helping participants improve their self-efficacy and coping skills.

Research on AA has found that older adults who attend more group meetings and have a sponsor have better 1-year alcohol-related and mental stress outcomes and less alcohol use at

5-year follow-up than those who do not.[774] The structured social support of AA may help older adults whose social networks have become smaller by improving their interpersonal and social coping skills.[775,776]

Some research has found that older adults are less likely to attend AA meetings than younger adults. Results are mixed on older adults' level of involvement in AA meetings compared with that of younger AA members.[777,778] **Sometimes older adults feel shut out** by the culture, language, and experiences of younger adults in AA meetings. However, other evidence indicates that older adults' membership in AA is increasing. The AA Membership Survey showed increases from 2007 to 2014 in members ages 61 to 70 (from 12.3 percent to 18 percent) and in members ages 71 and older (from 5.3 percent to 7 percent).[779]

Starting and staying in AA may be challenging for older adults with AUD, but not participating may put older adults at increased risk for return to alcohol use and negative long-term outcomes.[780] **When older adults do participate in AA, they benefit by:**[781,782]

- Having better drinking-related outcomes.
- Feeling less stress.
- Participating in more spiritual practices.
- Increasing social interactions and support.
- Having improved recovery.

BARRIERS TO AA ATTENDANCE FOR OLDER ADULTS[783]

- Lacking transportation
- Facing physical limitations
- Feeling uncomfortable going to meetings at night
- Having smaller social networks because of aging
- Having less interest than younger adults in increasing their social networks
- Relying on a spouse for recovery support

SMART Recovery

SMART Recovery is a network of local and online abstinence-focused recovery support groups that is based on principles of CBT and MI. Unlike AA meetings, SMART Recovery meetings are run by trained volunteers. The SMART program[784] is based on helping people:

- Build and keep motivation.
- Cope with urges.
- Manage thoughts, feelings, and behaviors.
- Live a balanced life.

The principles and structured format of SMART Recovery follow CBT and MI approaches to treating older adults. Research suggests that it is as effective as other community-based mutual-help approaches in supporting abstinence and in reducing the severity of the effects of alcohol misuse, particularly for people with less severe AUD.[785] SMART Recovery may also be an important option for those who feel uncomfortable with the spiritual underpinnings of AA and the 12-Step approach. Although the mutual-help group is less available in some areas of the country, online or telephone meetings are becoming more popular in all recovery support groups.

The program does not support use of labels such as "alcoholic," which may benefit older adults who feel shame and fear discrimination or judgment because of having AUD. SMART Recovery, like AA, offers chances for older adults to improve their recovery and quality of life by serving as volunteers.

RESOURCE ALERT: SMART RECOVERY WEBSITE

The SMART Recovery website (www.smartrecovery.org) gives information about SMART Recovery principles and training opportunities, including how to become a facilitator for meetings. It also has a searchable database of local and online meetings.

You can help older adults become involved in mutual-help groups by:

- Actively linking clients to available mutual-help groups, and supporting them in trying different groups so that they can find the one that best fits their needs.
- Asking clients about their understanding of and any past participation in mutual-help groups.
- Discussing the benefits of being involved in mutual-help groups as a part of recovery.
- Exploring ways to overcome barriers to joining and participating in mutual-help groups.
- Contacting local, regional, or state AA groups or other mutual-help groups or recovery community organizations (RCOs; see text box) to ask about community outreach efforts for older adults.
- Helping older clients find an age-friendly home group with older adult participants or a Seniors in Sobriety meeting (see "Resource Alert: Seniors in Sobriety").
- Linking older adults to mutual-help group volunteers/peer recovery support specialists who can introduce them to the group, attend some meetings with them, and introduce them to other older members.
- Teaching them about sponsorship and how clients can find an AA sponsor or mutual-help group mentor who can guide them in the recovery process.

RESOURCE ALERT: SENIORS IN SOBRIETY

Since 1990, AA has actively reached out to older adults with AUD. Efforts include urging local meetings to be senior friendly and starting Seniors in Sobriety (SIS) meetings. The SIS website (www.seniorsinsobriety.com/) has information on SIS's history, focus, and annual conference and other meetings.

WHAT IS AN RCO?

"A recovery community organization (RCO) is an independent, nonprofit organization led and governed by representatives of local communities of recovery. These organizations organize recovery-focused policy advocacy activities, carry out recovery-focused community education and outreach programs, and supply peer-based recovery support services (P-BRSS)."[786]

Search for an RCO near you (https://facesandvoicesofrecovery.org/arco/arco-members-on-the-map/).

The consensus panel recommends that you actively link older clients to age-sensitive case management and ongoing recovery supports for older adults. Family, caregivers, and community-based mutual-help groups are key elements of recovery support for older adults.

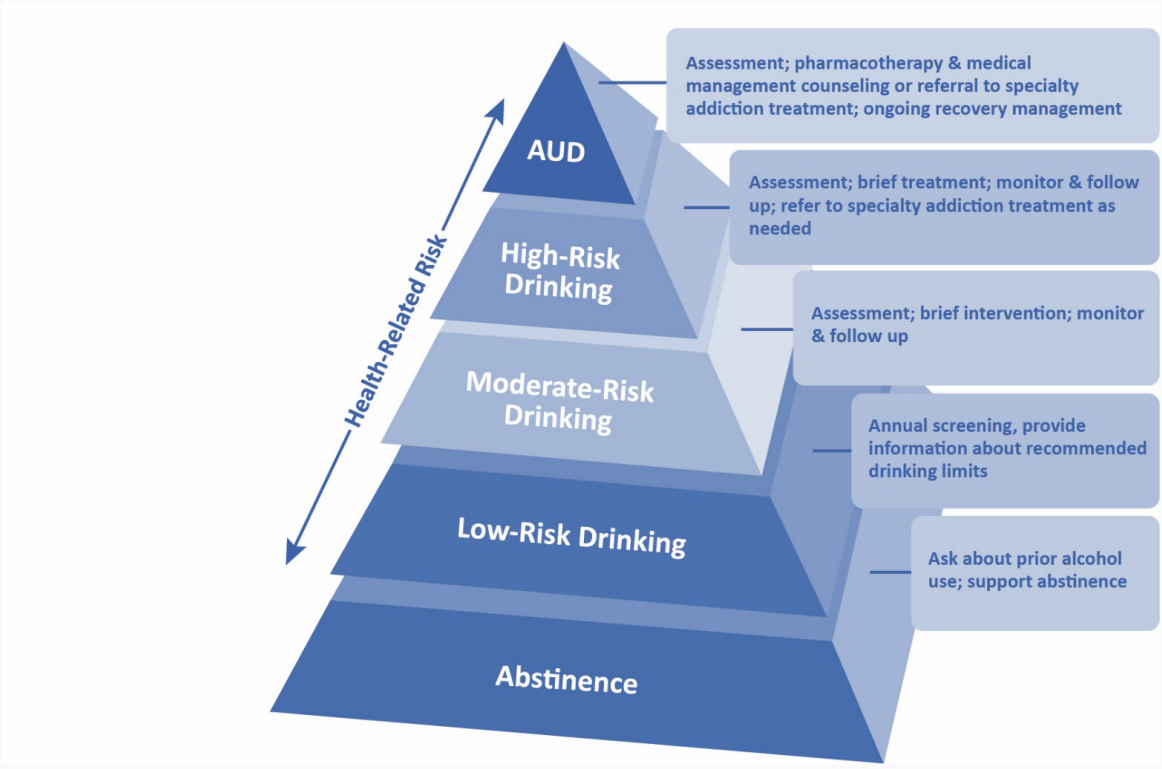
Clinical Scenarios

The level of intensity of clinical interventions for older adults should match the severity of alcohol misuse. Interventions range from healthcare providers asking clients about their alcohol use during an annual screening to inpatient treatment for older adults who have AUD. Exhibit 4.9 shows how to match levels of health-related risk associated with alcohol misuse with different clinical interventions.

The higher up the pyramid, the higher the level of risk and the more intense the intervention. In this graphic, the level of health-related drinking risk is defined as follows:

- **Abstinence:** Does not currently use alcohol.
- **Low-Risk Drinking:** Drinks within recommended limits.
- **Moderate-Risk Drinking:** Drinks above recommended limits.
- **High-Risk Drinking:** Binge drinks or drinks above recommended limits and has a co-occurring health condition or mental disorder.
- **AUD:** Meets DSM-5 diagnostic criteria for AUD.

EXHIBIT 4.9. Alcohol Health-Related Risk and Treatment Response Pyramid[787,788,789]



The following clinical case scenarios are examples of different levels of alcohol misuse. They show how to use prevention strategies and clinical interventions that match risk levels in Exhibit 4.9.

Clinical Scenario: Abstinence

During the initial screening for alcohol misuse, ask about earlier alcohol use even if the older adult reports that he or she does not drink at all. The older adult may have always abstained from alcohol, identify as being in recovery, or have stopped drinking for health-related reasons, which is common as people age. The following clinical scenario shows the importance of asking about earlier alcohol use when deciding which treatment to offer.

- **Abstinence:** An older adult reports no alcohol use in the past 3 years.
- **Treatment Setting:** Outpatient healthcare clinic
- **Provider:** Nurse practitioner (NP)
- **Prevention/Treatment Strategies:** Ask about earlier alcohol use; support abstinence using a brief problem-solving intervention.

George is 76 years old and has been divorced for 5 years. He recently moved to a retirement community near his oldest daughter. He goes to see a new primary care provider for an initial medical exam. As part of the health history questionnaire, which includes the AUDIT, George says that he does not currently drink, but he was injured earlier because of his drinking. His primary care provider reviews George's questionnaire and

sees that George does not meet the AUDIT criteria for alcohol misuse but flags the item about alcohol-related injury.

During the clinical interview, the provider asks about an item on the AUDIT in a curious, nonjudgmental way. The NP says, "I noticed on the health questionnaire that you may have been injured after drinking. Can you tell me more about that?" George says that he used to drink from time to time, but 3 years ago he twisted his ankle badly after having a couple of drinks and had to use a walker for several weeks. He tells the NP that he decided not to drink at all because he didn't want to risk any more injuries. The NP praises his commitment to his health and urges him to continue to avoid drinking.

George feels comfortable opening up to the NP and says that since he moved to the retirement community, he has participated in a lot of social activities with alcohol. He likes socializing but feels uncomfortable when people offer him drinks all the time. He says, "I know they are just being friendly, but sometimes they just don't give up." George states that he does not want to drink but does want to keep going to the social activities. The NP uses brief problem-solving by asking George, "How have you dealt with a challenge like this in the past?" The NP then invites George to brainstorm some solutions to the current problem, including ideas from his earlier struggles. George decides that he can say "no" firmly and tell people that alcohol doesn't agree with him when they continue to urge him to drink. George states that he feels good about that solution and will try it out at the next social event. The NP writes a treatment note about George's chosen solution in the electronic medical record and gives him a copy, telling him that if this plan doesn't work to schedule a follow-up visit soon.

Clinical Scenario: Low-Risk Drinking

For many older adults, the relationship with their primary care provider is often one of their strongest and most stable. The annual physical is a chance to screen for alcohol misuse and any changes in alcohol use related to life events, such as a death in the immediate family. The following scenario addresses the importance of conducting an annual screen for alcohol misuse with older adults and shows how to actively link clients to a referral for grief counseling and care coordination.

- **Low-Risk Drinking:** An older adult drinks within recommended guidelines and has no co-occurring physical or mental illness that limits daily functioning.
- **Treatment Setting:** Integrated outpatient medical and behavioral health clinic
- **Providers:** Primary care provider (PCP); licensed clinical social worker
- **Prevention/Treatment Strategies:** Screen for alcohol misuse, depression, and stressors that may put the older adult at risk for increased alcohol use; supply information on drinking guidelines for older adults; offer a menu of options for addressing grief; coordinate follow-up care.

Lily is 80 years old. Her husband of 60 years died 6 months ago. Lily goes to her doctor for her annual physical. Her PCP tells Lily that she is sorry to hear about her husband's death. They talk for a few minutes about how she is doing and what kinds of recreational activities and social support she has in her life right now. Lily tells her PCP that she belongs to the local church and is still active

REMINDER ABOUT DRINKING IN RETIREMENT COMMUNITIES

Hazardous drinking may be more common among older adults in age-separated residential settings (e.g., continuing care and planned retirement communities) than community-dwelling older adults. A recent survey reported that 15.4 percent of people who took the survey and live in a large retirement community had hazardous drinking compared with around 10 percent in the general older adult population.[790] Although older adults in these settings may drink to cope with problems, they usually drink because they want to socialize, and they believe that their peers affect their drinking.[791] Avoiding alcohol in these settings can be a challenge for older adults.

in volunteer activities there. Her son and her granddaughter live nearby and visit on a regular basis. She goes to an arts and crafts class on Wednesday afternoons at the local senior center.

The PCP then tells Lily that she wants to ask her a few more questions about her health, including alcohol use, if that is okay with her. Lily feels comfortable talking with her PCP and agrees. The PCP mixes in questions from both the AUDIT and the SMAST-G with her general health questions. Lily says that she drinks one 5-ounce glass of white wine two to three times a week (an AUDIT score of three) and sometimes has another drink when she feels lonely (an SMAST-G score of one), but she has not used more alcohol since her husband died. She says, "If I drink too much, I feel lightheaded, and I worry that I'll fall and break something."

The PCP offers information on drinking guidelines and praises Lily for staying within those guidelines. The PCP then tells her that sometimes when older people lose a spouse, they may start drinking a bit more when they feel sad or lonely or they may simply lose track of how much they are drinking. The PCP tells Lily to call her if that happens. Lily says she will, then states, "You know, I have been feeling a bit blue in the past few weeks, and I haven't been sleeping well. I really miss him."

The PCP follows up on Lily's statement by saying, "It seems like you are keeping busy and have a lot of good support in your life. At the same time, I am wondering if it would be helpful to have someone other than your family to talk to about how you have been feeling recently. I can suggest a few options if you are interested." Lily says that she doesn't like to burden her family and that talking to someone might be good. The PCP offers two suggestions: "There is a grief support group at the same senior center where you take your arts and crafts class. Or, I can introduce you to a counselor right here at the clinic who knows a lot about helping folks with loss." Lily says she wouldn't feel comfortable talking in a group. The PCP describes the counselor with whom she would like Lily to talk. Lily agrees to meet her after the appointment with the PCP. The PCP also conducts an initial depression screening.

The PCP arranges a follow-up phone call for Lily from the nurse care manager who will coordinate care with the PCP and the counselor. The PCP then walks Lily over to the licensed clinical social worker at the clinic and does a "warm handoff." The licensed clinical social worker talks briefly with Lily, gives her a large-print handout that explains the grieving process, and schedules a follow-up visit that includes a depression assessment. (See the Chapter 4 Appendix for a large-print handout on grief for older adults.)

Clinical Scenario: Moderate-Risk Drinking

All too often, spouses of people who misuse alcohol drink as a shared social activity with their spouse. For older spouses, this can easily turn into their own health risk behavior, particularly if, to reduce the stress of being a caregiver, they take medication that negatively interacts with alcohol. The following scenario focuses on the importance of assessing family members' alcohol and medication use while at the same time addressing their needs as caregivers.

- **Moderate-Risk Drinking:** An older adult drinks above recommended limits while also taking a sedating medication.
- **Treatment Setting:** Outpatient behavioral health program
- **Provider:** Behavioral health service provider (provider)
- **Prevention/Treatment Strategies:** Supply information about drinking guidelines; screen for anxiety; give information about risks for alcohol and medication use; explore strategies for family members to address the spouse's drinking and to address caregiver needs.

Rose is 69 years old. She is married to Ed, who is 78 years old. Ed drinks heavily daily, has a history of bipolar disorder, and recently was diagnosed with early-stage dementia. Ed sees the same PCP as Rose and also sees a psychiatrist for medication management for bipolar disorder. Rose is growing more worried about Ed's drinking and is unsure of how to take care of him as his dementia worsens.

Rose calls an outpatient behavioral treatment program after a friend of hers tells Rose that she is worried about Rose's health. The friend also recommends a counselor she had seen there.

At the initial appointment, the provider assesses Rose's substance use. Rose reports that she drinks one to three standard glasses of wine about three to four times a week when she and Ed go out to dinner or to social events. She also tells the counselor that she takes a benzodiazepine prescribed by her PCP about one to two times a week when she can't sleep. Rose states, "When Ed drinks at night, he becomes aggressive and sometimes gets very confused. I worry about him so much that I can't get to sleep."

The counselor acknowledges Rose's distress about Ed's drinking, then asks her if it would be okay to talk with her briefly about her drinking and use of benzodiazepines. Rose agrees. The counselor offers this personalized feedback to Rose: "Based on what you have told me about your own drinking, it looks like you are drinking over the recommended guidelines on the days you have more than one drink a day. Also, you may not be aware that the sleep medication you are taking can increase the depressant effect of alcohol in your body and could put you at risk for oversedation, memory loss, and even overdose if you forget how much you had to drink or mistakenly take too many pills." The counselor asks Rose what she makes of this information. Rose says, "I had no idea that drinking and taking sleep medication might be so dangerous. It also makes me think that I might not be helping Ed with controlling his drinking if I drink with him."

After exploring possible strategies to address her own health risks, Rose decides that she will stop drinking completely while she is taking the sleep medication and tell Ed why she can't drink with him when they go out. The counselor supports Rose's decision and suggests that one way she can help Ed is to find positive recreational activities that they can share without drinking. Rose becomes excited and says she can think of several things they can do together that they both enjoy without drinking, like going to lectures at the local senior adult education program.

The counselor then asks Rose to tell her more about her difficulties with worry and sleep, and conducts an anxiety screening. They also explore self-care strategies for managing worry and getting to sleep. Rose decides she can tell Ed that she is going to sleep in another room if he is up late and has been drinking. The counselor then teaches Rose a relaxation exercise she can do before bed, and Rose practices it in the session. Rose agrees to talk with her doctor about less risky medication for sleep.

RESOURCE ALERT: OLDER ADULTS AND SLEEP

The National Institute on Aging has a webpage with information and useful tips for helping older adults get a good night's sleep (www.nia.nih.gov/health/good-nights-sleep).

The counselor shifts the conversation to what further support Rose may need to address Ed's drinking while taking care of herself. Rose identifies her PCP and Ed's psychiatrist as potential supports. She states that Ed has given permission for her to talk with both. The counselor suggests she ask both to discuss Ed's drinking with him, state firmly that Ed should not drink at all, and then put their recommendations in writing. Both Ed and Rose can then refer to the recommendations instead of getting into an argument about his drinking. Rose likes this idea and feels confident that she can express her concerns to both of Ed's providers and ask for their help in addressing Ed's alcohol misuse.

The counselor explores other self-care and recovery strategies with Rose, including Al-Anon and a dementia caregiver support group. Rose is not sure that she wants to try Al-Anon but then agrees to talk with a peer recovery support specialist the counselor knows at the local recovery community center who is Rose's age and helps family members. The counselor sets up a series of sessions with Rose. She will continue to track Rose's drinking, benzodiazepine use, and strategies for self-care.

Clinical Scenario: High-Risk Drinking

Older adults may not know that their drinking is negatively affecting their physical and mental health. The following scenario focuses on the importance of screening for alcohol misuse in settings where older adults are being treated for mental disorders and shows how a brief intervention focused on alcohol use can improve physical and mental health.

- **High-Risk Drinking:** An older adult drinks above recommended limits, including binge drinks, and has a co-occurring mental disorder (depression) and health condition (high blood pressure).
- **Treatment Setting:** Hospital-based mental health clinic
- **Provider:** Geriatric psychiatrist
- **Prevention/Treatment Strategies:** Supply feedback on AUDIT score; give information about the risks of taking medications for depression and high blood pressure while drinking; offer nonjudgmental advice about abstaining from alcohol use; continue to watch alcohol and medication use.

Carl is 68 years old. His PCP refers him to a geriatric psychiatrist for medication management of his major depression. Carl currently takes one tricyclic antidepressant—which, when taken with alcohol, increases his risk for oversedation and low blood pressure—and a blood pressure medication, which can lower his blood pressure even more. The psychiatrist gives Carl the clinical interview version of the AUDIT as part of the initial psychiatric evaluation. Carl's score on the AUDIT is a 9 and includes positive responses to daily drinking and binge drinking about once a month.

The psychiatrist offers Carl nonjudgmental feedback about his AUDIT score and says that Carl's drinking may be worsening both his depression and his high blood pressure. At first, Carl makes light of his drinking by saying, "I really don't drink that much. And besides, I have been drinking the same amount for years, and it's never been a problem before." The psychiatrist acknowledges Carl's mixed feelings, then asks if he would be interested in more information. After Carl agrees, the psychiatrist describes the health risks of drinking while taking antidepressants and blood pressure medication, stating in a nonjudgmental, factual tone that alcohol can keep his medications from working correctly. He also states that the type of antidepressant Carl is taking can lead to low blood pressure when he drinks, especially when taken with his blood pressure medication, and can cause harmful effects like increased depression, dizziness, and fatigue. Carl responds, "Now that you mention it, I have noticed feeling very tired in the afternoon. I really don't like feeling that way. It's like the depression is getting worse."

The psychiatrist supports Carl's ability to make his own decisions, then gives him clear advice: "Although it is up to you in the end, I think that in your situation you are better off not drinking at all while you are being treated for depression and high blood pressure. What do you think you would like to do about the drinking?" Carl agrees to stop drinking to see whether abstinence improves his health. The psychiatrist supports Carl's decision; summarizes their conversation; writes out a brief alcohol use agreement that supports Carl's decision to remain abstinent but also tracks his alcohol use if he does drink; and schedules a follow-up visit in a month. (See the Chapter 4 Appendix for an alcohol use agreement and drinking tracking cards.)

At the next visit, Carl says that his depression has gotten better and that he no longer feels tired or gets dizzy. Carl says that he wants to continue not drinking because he feels so much better. The psychiatrist supports Carl's efforts to avoid drinking and, after discussion with Carl, prescribes a different antidepressant medication for him. In future medication management visits, the psychiatrist tracks Carl's depression, his response to the new medication, his blood pressure, and his success in avoiding alcohol.

Clinical Scenario: AUD

Older adults with a long history of heavy drinking, multiple past periods of treatment, or co-occurring mental disorders often need medically supervised withdrawal and age-sensitive, age-specific treatment to address multiple co-occurring

conditions at the same time. This scenario focuses on age-specific treatment, RPT, and recovery support for an older adult with AUD and co-occurring disorders.

- **AUD:** An older adult has a long history of heavy drinking and meets criteria for AUD.
- **Treatment Setting:** Inpatient detox and rehabilitation program
- **Provider:** Licensed alcohol and drug counselor on a multidisciplinary treatment team
- **Treatment Strategies:** Offer CBT, RPT adapted for older adults, trauma-informed counseling strategies to address emotional dysregulation, and recovery management strategies.

Barb is 72 years old and enters an inpatient treatment program after her three adult children intervene. She has a long history of heavy drinking and brief periods of treatment followed by a return to drinking. Barb has been married four times and was recently divorced from her fourth husband. She has been diagnosed with anxiety, depression, posttraumatic stress disorder, and binge eating disorder, for which she had gastric bypass surgery. This is her fourth treatment for AUD. Her pattern of returning to drinking tends to happen when she is having difficult relationships, intense emotions, and traumatic stress reactions. Barb is carefully watched throughout detoxification at the facility; she is then transferred to the rehabilitation program, which includes an age-specific track for older adults.

Barb's primary counselor offers relapse prevention approaches, which are focused on identifying and managing relapse triggers. Barb's CBT counseling focuses on strategies to address the communication issues between Barb and her daughter and to help her identify and replace negative automatic thoughts about drinking triggered by relationship problems. For example, when Barb's daughter criticizes her, Barb feels ashamed. Barb replaces the negative thought, "I drink because I can't stand to feel ashamed" with a more positive thought, "I can stand to feel shame for a while, until the urge to drink goes away."

Barb's group counseling at the older adult program includes focused topic groups for older adults, relapse prevention coping skills groups, and a DBT group. The DBT group teaches her mindfulness skills for distress tolerance, emotional regulation, and effective interpersonal interactions. With permission, Barb's counselor keeps contact with her family. They attend family group sessions, too.

During an individual session, Barb and her counselor discuss her improvement in treatment. The counselor opens the conversation: "I know this is your fourth time in treatment. How would you say this time has been different for you?" Barb says, "I really like the group discussions on topics that are important to me at this stage in my life. Staying here for such a long time has helped a lot, too. I needed the extra time to let all this information about recovery and all the skills I have learned really sink in."

Near the end of her time at the treatment facility, Barb's counselor actively links her to a continuing care group and individual outpatient counseling at an addiction treatment program in her community, as well as women's and senior-friendly AA meetings. Staying in treatment longer allows Barb to improve her emotional regulation, work on relapse prevention, and improve her interpersonal skills in a safe, supportive place. It also helps her get connected to community-based support before she ends treatment.

RESOURCE ALERT: DBT

DBT, a variation of CBT, was developed for adult women with chronic suicidal behavior who meet the diagnostic criteria for borderline personality disorder.[792,793] More recently, adaptations of DBT skills training have been shown to help adults with borderline personality disorder and SUDs, adults with binge eating disorder, older adults with depression, and family caregivers of older adults with dementia.[794,795] DBT uses mindfulness practices and helps people manage overwhelming emotions. This skill-building approach shows promise in treating older adults with emotional dysregulation and poor interpersonal skills.

For more information about DBT, the latest research, and training opportunities, go to the website of the Behavioral Research and Therapy Clinics at the University of Washington (http://depts.washington.edu/uwbrtc/).

Summary

As older adults' levels of alcohol use and related risk of negative health effects increase, more complex and intense interventions are needed. MI and adaptations of CBT (including PST and RPT) are useful in brief interventions and long-term treatment. Whichever strategy you use, take a nonconfrontational, age-sensitive approach when working with older adults with alcohol misuse, including AUD. Ongoing recovery management strategies increase the chance that improvements will continue over time and not only help older adults reduce negative alcohol-related health and mental health outcomes, but also help improve their quality of life.

Chapter 4 Resources

Provider Resources

A Clinician's Guide to CBT With Older People (www.uea.ac.uk/documents/246046/11919343/CBT_BOOKLET_FINAL_FEB2016%287%29.pdf/280459ae-a1b8-4c31-a1b3-173c524330c9): This workbook explores age-sensitive strategies for adapting CBT for older adults.

BNI-ART Institute—Tools for the Brief Negotiated Interview (BNI) (www.bu.edu/bniart/sbirt-in-health-care/sbirt-educational-materials/sbirt-brief-intervention/): This webpage includes an algorithm, or script, that guides providers through an intervention for substance misuse with carefully phrased key questions and responses.

Motivational Interviewing Network of Trainers (https://motivationalinterviewing.org): This website includes references, articles, videos, and links to training opportunities in the theory and practice of MI.

National Council on Aging—Resources (www.ncoa.org/audience/professional-resources/?post_type=ncoaresource): This webpage contains a searchable database of articles, webinars, and manuals.

Consumer Resources

AA—*A.A. for the Older Alcoholic—Never Too Late* (large print) (www.aa.org/assets/en_US/p-22_AAfortheOlderAA.pdf): This brochure describes the stories of men and women who became involved with AA as older adults and includes comments from AA speakers at meetings.

National Association of Area Agencies on Aging (n4a) (www.n4a.org): This national association provides searchable services, resources, and advocacy for older adults and professionals who work with them.

National Council on Aging—Resources (www.ncoa.org/audience/older-adults-caregivers-resources/?post_type=ncoaresource): This webpage contains a searchable database of articles and webinars.

National Institute on Aging—Alcohol Use or Abuse (www.nia.nih.gov/health/topics/alcohol-use-or-abuse): This webpage contains links to older adult-specific information on alcohol misuse.

NIAAA Alcohol Treatment Navigator (https://alcoholtreatment.niaaa.nih.gov): In addition to helping visitors find the best alcohol misuse treatment options, this treatment navigator details a step-by-step process for understanding AUD.

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Chapter 4 Appendix

Alcohol Use Disorders Identification Test (AUDIT): Interview Version

Read questions as written. Record answers carefully. Begin the AUDIT by saying "Now I am going to ask you some questions about your use of alcoholic beverages during this past year." Explain what is meant by "alcoholic beverages" by using local examples of beer, wine, vodka, etc. Code answers in terms of "standard drinks." Place the correct answer number in the box at the right.

1. How often do you have a drink containing alcohol?
   (0) Never [Skip to Qs 9-10]
   (1) Monthly or less
   (2) 2 to 4 times a month
   (3) 2 to 3 times a week
   (4) 4 or more times a week

2. How many drinks containing alcohol do you have on a typical day when you are drinking?
   (0) 1 or 2
   (1) 3 or 4
   (2) 5 or 6
   (3) 7, 8, or 9
   (4) 10 or more

3. How often do you have six or more drinks on one occasion?
   (0) Never
   (1) Less than monthly
   (2) Monthly
   (3) Weekly
   (4) Daily or almost daily
   Skip to Questions 9 and 10 if Total Score for Questions 2 and 3 = 0

4. How often during the last year have you found that you were not able to stop drinking once you had started?
   (0) Never
   (1) Less than monthly
   (2) Monthly
   (3) Weekly
   (4) Daily or almost daily

5. How often during the last year have you failed to do what was normally expected from you because of drinking?
   (0) Never
   (1) Less than monthly
   (2) Monthly
   (3) Weekly
   (4) Daily or almost daily

6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?
   (0) Never
   (1) Less than monthly
   (2) Monthly
   (3) Weekly
   (4) Daily or almost daily

7. How often during the last year have you had a feeling of guilt or remorse after drinking?
   (0) Never
   (1) Less than monthly
   (2) Monthly
   (3) Weekly
   (4) Daily or almost daily

8. How often during the last year have you been unable to remember what happened the night before because you had been drinking?
   (0) Never
   (1) Less than monthly
   (2) Monthly
   (3) Weekly
   (4) Daily or almost daily

9. Have you or someone else been injured as a result of your drinking?
   (0) No
   (2) Yes, but not in the last year
   (4) Yes, during the last year

10. Has a relative or friend or a doctor or another health worker been concerned about your drinking or suggested you cut down?
    (0) No
    (2) Yes, but not in the last year
    (4) Yes, during the last year

Record total of specific items here

Scoring: The cutoff score indicating hazardous and harmful alcohol use for the AUDIT is generally 8; however, for older adults a score of 5 indicates a need for clarifying questions and further assessment.[796]

Adapted from Barbor et al. (2001).[797]

Alcohol Use Disorders Identification Test (AUDIT): Self-Report Version

CLIENT: Alcohol use can affect your health and interfere with some medications and treatments, so it's important that we ask some questions about your alcohol use. Your answers will remain confidential; please be honest.

Place an X in one box that best describes your answer to each question.

Questions	0	1	2	3	4	
1. How often do you have a drink containing alcohol?	Never	Monthly or less	2-4 times a month	2-3 times a week	4 or more times a week	
2. How many drinks containing alcohol do you have on a typical day when you are drinking?	1 or 2	3 or 4	5 or 6	7 to 9	10 or more	
3. How often do you have six or more drinks on one occasion?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
4. How often during the last year have you found that you were not able to stop drinking once you had started?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
5. How often during the last year have you failed to do what was normally expected of you because of drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
7. How often during the last year have you had a feeling of guilt or remorse after drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
8. How often during the last year have you been unable to remember what happened the night before because of your drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
9. Have you or someone else been injured because of your drinking?	No		Yes, but not in the last year		Yes, during the last year	
10. Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down?	No		Yes, but not in the last year		Yes, during the last year	
					Total	

Adapted from Barbor et al. (2001).[798]

Provider Note: The self-report version should be given to older clients to fill out. Ask them to return it to you, and then discuss the results with them. A cutoff score of 5 means you need to assess further.[799]

Short Michigan Alcoholism Screening Test-Geriatric Version (SMAST-G)

	Yes (1)	No (0)
1. When talking with others, do you ever underestimate how much you drink?		
2. After a few drinks, have you sometimes not eaten or been able to skip a meal because you didn't feel hungry?		
3. Does having a few drinks help decrease your shakiness or tremors?		
4. Does alcohol sometimes make it hard for you to remember parts of the day or night?		
5. Do you usually take a drink to relax or calm your nerves?		
6. Do you drink to take your mind off your problems?		
7. Have you ever increased your drinking after experiencing a loss in your life?		
8. Has a doctor or nurse ever said they were worried or concerned about your drinking?		
9. Have you ever made rules to manage your drinking?		
10. When you feel lonely, does having a drink help?		

TOTAL SMAST-G-SCORE (0-10) _____

SCORING: 2 OR MORE "YES" RESPONSES IS INDICATIVE OF AN ALCOHOL PROBLEM.

Ask the extra question below but do not calculate it in the final score.

Extra question: Do you drink alcohol and take mood or mind-altering drugs, including prescription tranquilizers, prescription sleeping pills, prescription pain pills, or any illicit drugs?

Large-Print Grief Handout

What Is Grief?

Grief is a natural response to loss. It's the emotional suffering you feel when something or someone you love is taken away. Whatever your loss, it's personal to you.

Coping With Grief

Although loss is a part of life that cannot be avoided, there are ways to help cope with the pain, come to terms with your grief, and eventually, find a way to move on with your life. This doesn't mean you will forget your loved one, but you can find a way to hold that individual in your heart and your memories while continuing to live your life. This includes:

- Acknowledging your pain.
- Accepting that grief can bring up many different and unexpected feelings.
- Understanding that your grieving process will be unique to you.
- Seeking out face-to-face support from people who care about you.
- Supporting yourself emotionally by taking care of yourself physically.
- Learning the difference between grief and depression.

The Grieving Process

Grieving is highly individual; there's no right or wrong way to grieve. The grieving process takes time. Healing happens gradually; it can't be forced or hurried—and **there is no "normal" timetable for grieving.** Some people start to feel better in weeks or months. For others, the grieving process is measured in years. Whatever grief is like for you, it's important to be patient with yourself and allow the process to naturally unfold.

Reprinted with permission.[801]

Alcohol Use Agreement and Drinking Diary Cards

The purpose of this step is to decide on a drinking limit for yourself for a particular period of time. Negotiate with your healthcare provider so you can both agree on a reasonable goal. A reasonable goal for some people is abstinence—not drinking any alcohol.

As you develop this agreement, answer the following questions:

- How many standard drinks?
- How frequently?
- For what period of time?

Agreement

Date _____

_____

_____

_____

Client signature _____

Clinician signature _____

Drinking Diary Card

One way to keep track of how much you drink is the use of drinking diary cards. One card is used for each week. Every day record the number of drinks you had. At the end of the week add up the total number of drinks you had during the week.

Card A

Keep Track of What You Drink Over The Next 7 Days

Starting Date _____				
	Beer	Wine	Liquor	Number
Sunday				
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				
		WEEK'S TOTAL:		

Card B

Keep Track of What You Drink Over The Next 7 Days

Starting Date _____				
	Beer	Wine	Liquor	Number
Sunday				
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				
			WEEK'S TOTAL:	

Adapted from material in the public domain.[802]

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Chapter 5—Treating Drug Use and Prescription Medication Misuse in Older Adults

KEY MESSAGES

- Illicit drug use and prescription medication misuse do occur in older adults, but they are treatable.
- Regular screening and assessment can help you learn whether an older client is struggling with drug use or prescription medication misuse.
- Education and brief interventions are often enough to help older adults prevent, reduce, or stop drug use and prescription medication misuse. Most older clients who use illicit drugs or misuse prescription medication do not need care from programs or providers that specialize in substance use disorder (SUD) treatment.
- Age-specific and age-sensitive treatments are useful in reducing drug use and prescription medication misuse and related health risks. These treatments are designed to meet the special physical, cognitive, and social needs of older individuals. For many older adults, these adaptations can make all the difference in helping them start, stay in, and benefit from treatment.

Chapter 5 of this Treatment Improvement Protocol (TIP) will benefit healthcare, behavioral health service, and social service providers who work with older adults (e.g., physicians, nurse practitioners [NPs], physician assistants, nurses, social workers, psychologists, psychiatrists, mental health counselors, drug and alcohol counselors, peer recovery support specialists). It addresses drug use, prescription medication misuse, and SUDs other than alcohol use disorder among older adults.

Prescription medications are some of the most commonly misused substances in this population,[803] and rates of substance misuse in general are increasing. These increases result, in part, from the size of the aging baby boomer generation (those born from 1946 to 1964) and the fact that baby boomers are living longer and have higher rates of lifetime substance misuse, including SUDs, than past generations.

Many older adults who misuse substances do not need specialized SUD treatment. Prevention strategies and brief interventions are often enough. Even so, research shows that older adults do benefit from addiction treatment.[804,805,806] In fact, older adults in addiction treatment programs are more likely than younger adults to complete treatment, and older adults have nearly as good or better outcomes.[807,808] Thus, as the older population in the United States grows, the need for a full range of treatment approaches that meet the unique requirements of older adults will continue to increase.

Organization of Chapter 5 of This TIP

This chapter of TIP 26 addresses rates of drug use and prescription medication misuse, including drug use disorders, among older adults as well as treatment and recovery management approaches that meet older adults' specific needs.

The first section of Chapter 5 describes illicit drug use and prescription medication misuse, including drug use disorders, among older adults. Definitions and facts are discussed as well as the physical, mental, social, and economic effects of drug use disorders.

The second section describes how to identify, screen, and assess for drug use disorders in older adults. The parts of screening, brief intervention, and referral to treatment (SBIRT) are discussed, along with specific tips for screening older adults.

The third section describes the continuum of care for older adults with drug use disorders, which ranges from brief interventions for prescription medication misuse to inpatient detoxification and rehabilitation for older adults with drug use disorders.

The fourth section discusses specific treatment approaches for older adults with drug use disorders. These approaches include acute care, overdose treatment, medically supervised withdrawal, medication maintenance therapy, psychosocial approaches, age-specific treatment options, referral management, and care coordination.

The fifth section provides an overview of recovery management strategies for older adults with drug use disorders. It covers topics such as family member involvement in treatment and linking older adults to evidence-supported, community-based recovery support groups such as Narcotics Anonymous (NA) and Alcoholics Anonymous (AA).

The sixth section provides clinical scenarios. This section uses clinical case material to show how to apply approaches and strategies discussed in Chapter 5 to older clients.

The seventh section identifies targeted resources to support your practice. A more detailed resource guide is in Chapter 9 of this TIP.

For definitions of key terms you will see throughout Chapter 5, refer to Exhibit 5.1.

EXHIBIT 5.1. Key Terms

- **Addiction*:** The most severe form of SUD, associated with compulsive or uncontrolled use of one or more substances. Addiction is a chronic brain disease that has the potential for both recurrence (relapse) and recovery.
- **Age-sensitive:** Adaptations to existing treatment approaches that accommodate older adults' unique needs (e.g., a large-print handout on the signs of substance misuse).
- **Age-specific:** Treatment approaches and practices specifically developed for older adults (e.g., an older adult specialty group in a mixed-age SUD treatment program).
- **Caregivers:** Informal caregivers provide unpaid care. They assist others with activities of daily living (ADLs), including health and medical tasks. Informal caregivers may be spouses, partners, family members, friends, neighbors, or others who have a significant personal relationship with the person who needs care. Formal caregivers are paid providers who offer care in one's home or in a facility.[809] Most older adults do not need caregivers and are as able to address their own needs as younger adults, whether or not substance misuse is a factor in their lives.
- **Diversion:** A medical and legal term describing the illegal sharing of a legally prescribed, controlled medication (e.g., an opioid) with another individual.
- **Drug–drug interaction:** The interaction of one substance (e.g., alcohol, medication, an illicit drug) with another substance. Drug–drug interactions may change the effectiveness of medications, introduce or alter the intensity of side effects, and increase a substance's toxicity or the concentration of that substance in a person's blood. Potentially serious interactions can also occur with certain foods, beverages, and dietary supplements.[810]
- **Drug use:** The full range of severity of illicit drug use, from a single instance of use to meeting criteria for a drug use disorder.
- **Illicit substances:** Illicit substances include cocaine, heroin, hallucinogens, inhalants, methamphetamine, and prescription medications that are taken other than as prescribed (e.g., pain relievers, tranquilizers, stimulants, sedatives).

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- **Mutual-help groups:** Groups of people who work together on obtaining and maintaining recovery. Unlike peer support (e.g., the use of recovery coaches or peer recovery support specialists), mutual-help groups consist entirely of people who volunteer their time and typically have no official connection to treatment programs. Most are self-supporting. Although 12-Step groups such as AA and NA are the most widespread and well researched type of mutual-help groups, other groups may be available in some areas. They range from groups affiliated with a religion or church (e.g., Celebrate Recovery, Millati Islami) to purely secular groups (e.g., SMART [Self-Management and Recovery Training] Recovery, Women for Sobriety).
- **Peer support:** The use of peer recovery support specialists (e.g., someone in recovery who has lived experience in addiction plus skills learned in formal training) to provide nonclinical (i.e., not requiring training in diagnosis or treatment) recovery support services to individuals in recovery from addiction and to their families.
- **Prescription medication misuse:** The full range of severity of problematic use of prescription medication (meaning using a medication to feel good, using more than prescribed or in a way not prescribed, or using medication prescribed to someone else), from mild misuse to meeting criteria for an SUD.
- **Psychoactive substances:** Substances that can alter mental processes (e.g., cognition or affect; in other words, the way one thinks or feels). Also called psychotropic drugs, such substances will not necessarily produce dependence, but they have the potential for misuse or abuse.[811]
- **Recovery*:** A process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential. Even individuals with severe and chronic SUDs can, with help, overcome them and regain health and social function. This is called remission. When those positive changes and values become part of a voluntarily adopted lifestyle, that is called being in recovery. Although abstinence from all substance misuse is a cardinal feature of a recovery lifestyle, it is not the only healthy, pro-social feature.
- **Relapse*:** A return to substance use after a significant period of abstinence.
- **Remission:** A medical term meaning a disappearance of signs and symptoms of the disease or disorder. The fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) defines remission as present in people who previously met SUD criteria but no longer meet any SUD criteria (with the possible exception of craving).[812] Remission is an essential element of recovery.
- **Substance misuse*:** The use of any substance in a manner, situation, amount, or frequency that can cause harm to users or to those around them. For some substances or individuals, any use would constitute misuse (e.g., underage drinking, injection drug use).
- **Substance use disorder*:** A medical illness caused by repeated misuse of a substance or substances. According to DSM-5,[813] SUDs are characterized by clinically significant impairments in health and social function, and by impaired control over substance use. They are diagnosed through assessing cognitive, behavioral, and psychological symptoms. SUDs range from mild to severe and from temporary to chronic. They typically develop gradually over time with repeated misuse, leading to changes in brain circuits governing incentive salience (the ability of substance-associated cues to trigger substance seeking), reward, stress, and executive functions like decision making and self-control. Multiple factors influence whether and how rapidly a person will develop an SUD. These factors include the substance itself; the genetic vulnerability of the user; and the amount, frequency, and duration of the misuse. Note: A severe SUD is commonly called an addiction. A mild SUD is generally equivalent to what previous editions of DSM called substance abuse; a moderate or severe SUD is generally equivalent to what was formerly called substance dependence.

* The definitions of all terms marked with an asterisk correspond closely to those given in *Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health*. This resource provides a great deal of useful information about substance misuse and its impact on U.S. public health. The report is available online (https://addiction.surgeongeneral.gov/sites/default/files/surgeon-generals-report.pdf).

Drug Use and Prescription Medication Misuse Among Older Adults

Drug use and prescription medication misuse are growing problems among older adults. In the next decade, approximately 20 percent of the U.S. population will be over age 65.[814] As the large baby boomer population ages up, drug use and prescription medication misuse will likely increase. This group has higher rates of illicit drug use than past generations,[815,816] and their misuse of pain medication and other prescription medication is significant.

Taking opioids for pain is one pathway to drug use or prescription medication misuse for older adults. They may start taking opioids for pain and become physically dependent.

Other than alcohol and tobacco, the most commonly misused substances among older adults are psychoactive prescription medications, such as opioids and benzodiazepines (i.e., medications for sleep, pain, and anxiety). Research shows that older adults also use cannabis, cocaine, and heroin. For example, past-year cannabis use by older adults increased from 2006 to 2013 by 57.8 percent for adults ages 50 to 64 and by 250 percent for adults ages 65 and older.[817]

Drug use and prescription medication misuse can lead to many negative health outcomes for older adults, such as:

- Increased risk of injury and falls.
- Problems with thinking (also called cognitive impairment).
- Harmful drug–drug interactions.

Prescribed medication is not always misused on purpose. Older adults:

- Can accidentally take more of a prescribed medication than they meant to.
- Can accidentally mix up medications.
- May not know the potential risk of harmful effects of using certain substances (e.g., over-the-counter [OTC] medications, dietary supplements) while taking medication, even when taking it as prescribed.

- Overdose, which can be fatal.
- Suicide.
- Liver and heart disease.
- Sleep problems.

Drug use and prescription medication misuse have negative economic effects. They cost the United States billions of dollars each year, including $193 billion for illicit substances in 2007[818] (the last year in which those numbers were reported) and $78.5 billion for prescription opioids in 2013[819] (the last year in which those numbers were reported). Drug use and prescription medication misuse also lead to greater healthcare costs. Older adults already use more healthcare resources than younger adults. As older adults with drug use disorders age, they are at an increased risk of co-occurring medical conditions, which means they will use more healthcare services.[820,821,822]

Drug use and prescription medication misuse among older adults negatively affect relationships, families, and friends. Many family members, friends, and caregivers recognize but minimize drug use or prescription medication misuse among older adults. Well-meaning family and friends may assume that drug use and prescription medication misuse in older adults cannot be treated, especially if the behavior has been going on for a while. They may feel that the time for treatment has passed or that previous attempts at treatment make trying again pointless.[823,824] Often, friends and family view the use of certain substances by older adults as one of their "last pleasures" or distractions in life.[825]

Ageist, incorrect beliefs about drug use and prescription medication misuse among older adults can prevent older adults from getting treatment. Treatment access for older adults is key, as research increasingly shows that SUD treatment for older adults can reduce or stop drug use and prescription medication misuse and improve health/quality of life.[826,827,828,829,830]

Prescription Medication Misuse

Prescription medication misuse includes:

- Taking larger doses of a medication than prescribed.
- Changing the dose without guidance from the prescriber.

- Taking a medication for reasons other than its intended purpose.
- Taking someone else's medications.

Older adults are prescribed and use more medication than any other age group. From 2015 to 2016:[831]

- An estimated 87.5 percent of adults ages 65 and older took at least one prescription medication in the past 30 days, versus 67.4 percent of adults ages 45 to 64 and 35.3 percent of those ages 18 to 44.
- Adults ages 65 and older were the largest group of people taking five or more prescription medications in the past 30 days (39.8 percent) compared with adults ages 45 to 64 (19.1 percent) and adults ages 18 to 44 (3.9 percent).

Age-related changes to metabolism and body fat affect the medication dosage that older adults need and increase the risk of older adults feeling negative effects of medication. For example, older adults are very likely to feel memory-related and psychomotor effects of benzodiazepines and opioids. Also, older adults have a higher rate of co-occurring conditions than do younger adults, which means they take more medication and are more likely to experience harmful drug–drug, alcohol–drug, and drug–co-occurring condition interactions.[832,833]

Providers face challenges when prescribing for older adults in general and need to exercise extra caution. One challenge is that a medication may not have a recommended dosage for older adults, in which case providers should prescribe the minimum dosage needed to achieve a positive outcome. Prescribers also need to think about what formulation of a medication will work best for an older patient and what dosing schedule will be easiest to follow. Yet another common challenge is that older patients may be taking unnecessary medication given their specific clinical conditions. Such medication should be discontinued, consulting with the patient and using tapering as appropriate.[834,835] Also, some medications are potentially inappropriate for older adults: see the Chapter 6 text box on the American Geriatrics Society Beers Criteria®.

Younger people tend to misuse psychoactive prescription medication for mood effects (i.e., wanting to feel very happy or euphoric), but **older adults tend to develop drug use disorders because they are using drugs or misusing prescription medication to treat their chronic pain, anxiety, depression, and sleep issues.**[836,837,838]

Opioids

The United States is facing an opioid use and overdose crisis. (See SAMHSA's TIP 63, *Medications for Opioid Use Disorder*, for more information; https://store.samhsa.gov/product/TIP-63-Medications-for-Opioid-Use-Disorder-Full-Document/PEP20-02-01-006). The years 2006 to 2013 saw an increase in calls to U.S. poison control centers about older adults' misuse of prescription opioids, including misuse of prescription opioids for self-harm.[839]

Chronic pain is one of the most common reasons for taking medication. Older adults have the highest rate of chronic pain of any age group,[840] leading to more clinic visits and increased prescribing of opioid medication. Older adults with opioid use disorder (OUD) and chronic pain may have a hard time accepting that they have OUD.

Benzodiazepines

Benzodiazepines (e.g., lorazepam, alprazolam, clonazepam) are mainly used to treat sleep and anxiety disorders. Benzodiazepines are thought to be safer than barbiturates and nonbarbiturate sedative-hypnotics.[841] **However, the physical dependence potential for benzodiazepines is very high. Long-term use or misuse of benzodiazepines in older adults has many risks.** Results from more than 68 clinical trials show that benzodiazepines, no matter how long they are used (either short-, intermediate-, or long-acting) can lead to cognitive impairment. The greater the dose, the greater the impairment.[842]

Many older adults experience adverse drug reactions because they are managing numerous prescribed medications (sometimes from multiple prescribing physicians). Adverse drug reactions are not necessarily the result of intentional or accidental misuse; rather, they result from complying with a dangerous regimen of drugs.

Multiple Medications

The aging process causes changes to the body that increase the chances of older adults feeling negative effects of medication. For example, older adults have decreased ability to metabolize drugs. **Older adults often take more than one medication.**[843] **Negative effects are more likely to occur when older adults take many OTC or prescription medications.**[844] Taking more than one medication that affects the central nervous system (CNS) increases the risk of:[845]

- Problems with daily functioning.
- Cognitive impairment.
- Falls.
- Death.

Coprescribing of opioid and benzodiazepine medications is a concern. The risk of death increases with the dose of benzodiazepine prescribed.[846] In 2016, the Food and Drug Administration (FDA) issued a Drug Safety Communication warning about serious risks, including respiratory depression and death, from combining opioids with benzodiazepines or other CNS depressants (e.g., **alcohol**), and requiring boxed warnings for prescription opioids and benzodiazepines. FDA also cautioned that healthcare professionals "should limit prescribing opioid pain medicines with benzodiazepines or other CNS depressants only to patients for whom alternative treatment options are inadequate. If these medicines are prescribed together, limit the dosages and duration of each drug to the minimum possible while achieving the desired clinical effect." FDA further advised healthcare professionals to screen these patients for SUDs, plus listed other precautions.[847] Note that even greater caution should be used with older patients because of their higher risk of experiencing negative effects from medication.

FDA in 2017 advised against withholding buprenorphine or methadone treatment for OUD from patients taking benzodiazepines or other CNS depressants, but recommended careful medication management of these patients. Although combining these OUD medications with CNS depressants increases the risk of serious side effects, FDA noted that this risk can be outweighed by the risk and harm of untreated OUD.[848] For strategies on caring for these patients, see the FDA Drug Safety Communication at www.fda.gov/drugs/drug-safety-and-availability/fda-drug-safety-communication-fda-urges-caution-about-withholding-opioid-addiction-medications and the section "Concurrent Substance Use Disorders (SUDs) Involving Benzodiazepines or Alcohol" in SAMHSA's TIP 63 (https://store.samhsa.gov/product/TIP-63-Medications-for-Opioid-Use-Disorder-Full-Document/PEP20-02-01-006). Again, keep in mind the need for using extra caution with older patients.

Illicit Substances

Illicit substances include cocaine, heroin, hallucinogens, inhalants, methamphetamine, and prescription medications that are taken other than as prescribed (e.g., pain relievers, tranquilizers, stimulants, sedatives). Because federal law bans the recreational and medical use of cannabis, this publication considers it an illicit substance (although in some states, medical use of cannabis is legal and in others, both recreational and medical use are legal).

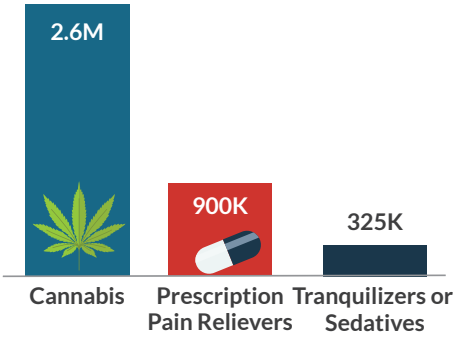
In 2019, 3.7 million adults ages 65 and older had used illicit substances in the past year.[849] Of these drugs, older adults most commonly used:[850]

- Cannabis: 2.6 million adults.
- Prescription pain relievers: 900,000 adults.
- Tranquilizers or sedatives: 325,000 adults.

From 2000 to 2012, SUD treatment admissions for illicit substance use increased for adults ages 55 or older.[851]

Rates of cannabis use among older adults are likely to continue rising. This is a major concern as baby boomers, who tend to be more accepting of cannabis use than previous generations, enter

3.7 MILLION ADULTS ages 65 and older used **ILLICIT SUBSTANCES** in 2019.



the later stages of life. From 2000 to 2019, the percentage of adults ages 50 to 64 who had ever used cannabis increased from approximately 24 percent to around 54 percent.[852,853]

The effects of using cannabis while also taking specific prescription medications are not known. However, **cannabis use is related to an increased risk of injury and short-term memory problems.** Cannabis affects central and peripheral nervous system processes in ways such as:[854,855,856,857]

- Increasing symptoms of anxiety and depression.
- Increasing problems with cognition and learning.
- Worsening motor coordination (i.e., the ability to use and control muscle movements).

Moreover, the increasing potency of cannabis in recent decades may make cannabis use riskier.[858]

Screening and Assessment

If you think a client might be using drugs or misusing prescription medication, screening measures will help you identify and address this behavior.[859] Screening older adults for drug use and prescription medication misuse and providing education about health risks related to interactions between prescribed medication, alcohol, and illicit substances are prevention strategies you can use in many different settings.

Screen and assess older adults for substance use and co-occurring medical and mental disorders (e.g., cognitive impairment) that can mask SUDs or appear similar to SUDs.

CO-OCCURRING CONDITIONS AMONG OLDER ADULTS

Older adults with SUDs have high rates of mental disorders and co-occurring health conditions. In 2019, an estimated 36.8 percent of adults older than age 50 with SUDs also had mental disorders.[860] Co-occurring mental disorders and SUDs among older adults are probably underdiagnosed, so the rates of co-occurring disorders (CODs) may actually be higher.[861]

Compared with older adults who have only an SUD or a mental disorder, those with both are at risk for:[862,863]

- Higher rates of inpatient and outpatient behavioral healthcare service use.
- Thoughts of suicide and of death in general.
- Certain physical conditions related to substance misuse (e.g., heart disease, organ damage, some cancers).

Given high rates of CODs in older adults with SUDs, you should use holistic, detailed approaches to screening, assessment, and treatment.

Screening Strategies

To successfully make routine screening for drug use disorders a part of your clinical practice with older adults, **use simple, consistent approaches that can be added to screening practices you already have in place.** Screening questions can be asked verbally, on paper, or electronically. Make sure print is large enough for older adults to read easily. Ask about drug use:[864]

- In a straightforward and nonjudgmental manner.
- While asking about other health behaviors (e.g., exercise, weight, smoking, alcohol use).
- While keeping the focus on helping clients improve their overall health, functioning, independence, and quality of life.

Screen adults ages 60 and older:

- Yearly, as part of the annual checkup in both healthcare and behavioral health service settings.
- When changes in physical or mental health status occur (e.g., falls, memory issues).

- During major life events or changes (e.g., retirement, moving, loss of a significant person).

The consensus panel recommends screening all adults ages 60 and older yearly and when life changes occur (e.g., retirement, loss of a partner or spouse, changes in health).

Several measures can help you screen for substance misuse, but few are validated (tested and approved for use) with older adults.[865] (See Chapter 3 of this TIP for an indepth discussion of substance use screening tools that can be used with older adults.)

One option is to use screening questions developed for the general adult population. For example, open your conversation with older clients by asking, "Have you taken a prescription medication differently than prescribed by your healthcare provider?" You can also use a single-question screener for drug use, such as, "How many times in the past year have you used an illegal drug or taken a prescription medication for nonmedical reasons?"[866] If the client says "yes" to the first question or answers the second question with one or more, begin more indepth screening.

Indepth screening includes asking clients about:

- Use of prescription and OTC medications.
- Use of other substances (e.g., alcohol, cannabis, tobacco).
- Amount/frequency of past-month substance use.
- Effects of using substances.
- Concerns about their substance use as well as concerns of family members or friends.

RESOURCE ALERT: NATIONAL INSTITUTE ON DRUG ABUSE-MODIFIED ALCOHOL, SMOKING, AND SUBSTANCE INVOLVEMENT SCREENING TEST

This screening tool (www.drugabuse.gov/sites/default/files/pdf/nmassist.pdf) offers a helpful way to organize your questions about types of substances used, lifetime and recent amount and frequency of substances used, and substance use concerns.

SCREENING FOR USE OF MULTIPLE MEDICATIONS: A BROWN BAG MEDICINE REVIEW

Older adults often take a number of prescribed medications as well as OTC medications and dietary supplements. As part of an annual physical, or given signs that the older client is misusing medications (e.g., benzodiazepines, opioids), urge the client (or a family member, with consent) to bring in all prescribed and OTC medications and dietary supplements in a bag so that you and the client can review them together. This is known as a "brown bag medicine review." This is a chance to discuss the health risks of taking multiple medications, of drug–drug interactions, and of misuse.[867,868] **Brown bag medicine reviews can improve client reporting of medication use and improve provider–client discussions about medication use.**[869]

When using verbal, electronic, or printed screeners:

- Be empathetic and nonconfrontational.
- Make the screening questions easy to understand.
- Speak clearly and repeat instructions or questions as needed, especially if the client has cognitive impairment or problems with vision or hearing. Make sure the client can hear and understand you.
- Use large type for printed questions and screen reader–friendly adaptations for computer screening.
- Ask questions about the client's illicit substance use or prescription medication misuse as a part of assessing overall health status.
- Assess and reassess if the client is having problems using a computer, tablet, or writing on a printed form. If needed, offer a verbal interview in which you read the screening questions.

Assessment and Diagnosis of Drug Use Disorders

Screening is the first step in performing an indepth assessment of substance misuse. Some signs of drug use disorders in older adults may be mistaken for symptoms of co-occurring

LINKING SCREENING QUESTIONS ABOUT SUBSTANCE USE TO HEALTH STATUS

You can help older adults understand the reason for your asking substance use questions by giving them information about age-related changes in metabolism and how specific medications, such as sedatives and antianxiety medications, can negatively interact with alcohol. You can also help older adults understand the relationship between substance use and health outcomes by discussing their substance use and other health problems, such as falls, high blood pressure, and depression.

medical or mental disorders. Using DSM-5 diagnostic criteria alone may underdiagnose older adults who have drug use-related and prescription medication misuse-related health and functioning problems. This can keep clients from getting needed treatment.

A full assessment should include questions about a client's:

- History of substance use (including alcohol and tobacco use).
- Age at which substance misuse issues began.
- Amount and frequency of substance use.
- Current prescription medications, OTC medications, and dietary supplements.
- Co-occurring medical conditions.
- Relationship between substance use and daily functioning.
- Co-occurring mental disorders, particularly depression and anxiety.
- Use of substances to cope with sleep problems, depression, anxiety, stress, or pain.
- Management of daily medication regimens.

Note any signs that clients may be under the influence of substances. Although clients who appear to be so may give incomplete answers, current influence of substances is by itself a clear sign that further assessment and intervention are needed.

DSM-5 Diagnostic Criteria

A formal SUD diagnosis is based on your client meeting 2 out of 11 DSM-5 diagnostic criteria. However, **some of the physical and social factors described in DSM-5 may not apply to older adults** because of age-related changes in tolerance to substances, cognitive functioning, role responsibilities, or social isolation.[870] **Exhibit 5.2 summarizes the physical, mental, and social aspects of aging you should consider when using these criteria to diagnose SUD in older adults.**

EXHIBIT 5.2. DSM-5 Criteria for SUD and Considerations for Older Adults

DSM-5 CRITERIA FOR SUD[871]	CLINICAL CONSIDERATIONS[872,873,874]
Criterion 1	Older adults may need less of a substance to feel its physical effects. In addition to age-related or co-occurring medical-related decline in cognitive functioning, use of many substances can increase cognitive impairment and the ability to keep track of the amount and frequency of substance use.
Criterion 2	This is the same as in the general adult population. There are no special considerations for older adults.

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DSM-5 CRITERIA FOR SUD	CLINICAL CONSIDERATIONS
Criterion 3	Effects from substance use can occur from using relatively small amounts compared with the general adult population.
Criterion 4	Although older adults may have cravings, they may not recognize substance cravings in the same way as the general adult population (e.g., cognitive decline may increase confusion about physiological cues related to craving).
Criterion 5	Role responsibilities may be different for older adults because of life-stage changes, like retirement. Role responsibilities more common among older adults include caregiving for a spouse with a chronic illness and parenting a custodial grandchild.
Criterion 6	Older adults may not realize their substance use is related to social or interpersonal problems.
Criterion 7	Older adults may participate in fewer activities than younger adults, making it difficult to know whether a reduction in activities is related to substance use. However, social isolation is related to substance use and should be noted and addressed.
Criterion 8	Older adults may not understand that their use is harmful, especially when using substances in smaller amounts. Older adults may not identify certain situations (e.g., using a step stool or taking medications together) as physically dangerous.
Criterion 9	Older adults may not realize their substance use is related to physical (e.g., gastrointestinal distress) or mental problems (e.g., anxiety).
Criterion 10	Because of increased sensitivity to substances with age, older adults may have lowered rather than increased tolerance depending on the substance used.
Criterion 11	Withdrawal symptoms among older adults can be less obvious and more drawn out. Older adults may not develop physical dependence if they started using the substance in late life; if prescribed and correctly using medications like benzodiazepines, they may develop physical dependence.

Biopsychosocial Assessment and Placement

The Level of Care Utilization System for Psychiatric and Addiction Services (LOCUS 20) is an assessment and placement tool that supports adoption of a systematic approach to these important steps in meeting the needs of older adults. The tool can be downloaded for free from www.communitypsychiatry.org/resources/locus.

Continuum of Care

The SUD treatment continuum of care has many points of intervention where older adults can receive services (Exhibit 5.3). Treatment for drug use disorders can be delivered in many different settings using behavioral and pharmacological methods.

EXHIBIT 5.3. SUD Treatment Continuum of Care

PREVENTION	EARLY INTERVENTION	TREATMENT	RECOVERY MANAGEMENT
Address individual and environmental risk factors for substance use through science-informed prevention strategies aimed at individuals, families, and communities.	Identify and screen for substance misuse; provide psychoeducation and brief interventions to reduce health risk; refer to treatment as needed.	Provide medication as needed, psychosocial interventions, and supportive services to achieve recovery and maximize functioning. Levels of Care: Outpatient Intensive outpatient/ partial hospitalization Residential/inpatient Medically managed intensive inpatient services	Offer comprehensive discharge planning, referral management, continuing care, and linkage to community-based services (e.g., mutual-help groups; medical care; social, legal, educational, and financial services) that support ongoing recovery and improve wellness and quality of life.

Adapted from material in the public domain.[875]

More than 14,500 specialized treatment facilities in the United States provide SUD services, such as:[876]

- Counseling.
- Rehabilitation.
- Behavioral therapy.
- Case management.
- Medication therapy.
- Psychoeducation.
- Peer recovery support services.

Early intervention for an older adult's drug use or prescription medication misuse can take place in a healthcare office, a hospital, an emergency department (ED), an outpatient behavioral health clinic, or an older adult-focused social service agency. Primary care providers (PCPs) are often the entry point for brief interventions and referral to drug use disorder-specific treatment.

Different levels of care include:

- Outpatient individual, group, and family counseling.
- Intensive outpatient care (i.e., daily or weekly individual and group counseling for many weeks/months).
- Residential care (i.e., 24-hour supervision and clinical monitoring).
- Medically managed inpatient care (i.e., treatment services in a medical or mental hospital setting).

When you work with clients to develop a treatment and recovery plan based on their preferences, as well as on the accessibility and appropriateness of the chosen treatment, clients are more likely to follow your recommendations. Unless clients present with active suicidal ideation, withdrawal risks, or an acute health concern (e.g., overdose, significant impairment, delirium, falls), let them choose their preferred treatment method. Offer options and discuss the benefits of each as they apply to each client.

Recovery management, including discharge planning and continuing care, is an important part of the continuum of care. Older adults leaving intensive addiction treatment should:[877]

- Have routine medical care for co-occurring, chronic medical conditions.
- Be linked with older adult-focused, community-based services.
- Be introduced and referred to recovery groups to support their ongoing recovery but also to reduce isolation and loneliness, which are common among older adults. (See Chapter 7 of this TIP for more information about social isolation.)

Treatment Approaches Suited to Older Adults

Many safe and effective interventions exist for older adults who use drugs, misuse prescription medication, or have drug use disorders. You should approach decisions about treatment by considering:

- The drug being used or the prescription medication being misused.
- The level of care needed (e.g., brief intervention, detoxification, maintenance).
- Overdose prevention and treatments.
- Psychosocial approaches adapted to older adults.

This section describes general approaches that work with older adults who misuse prescription medications and use illicit substances. It also describes treatment strategies for specific kinds of substances.

ENDING, CHANGING, OR CONTINUING TREATMENT[878]

Clients' progress in treatment, as gauged by clearly defined, agreed-upon goals, should determine their length of time in treatment. The main criterion for discharge is that clients have met treatment goals. If clients are making progress and that progress is likely to continue, treatment should continue. If clients cannot meet treatment goals or they develop new treatment-related challenges, they should receive recommendations for different types of services or treatments.

SBIRT

Many older adults who use illicit drugs or misuse prescription medication do not need specialized addiction treatment. Education is often enough to help older adults change their behaviors. Older adults often respond well to nonjudgmental, brief education about:

- Medications they are taking.
- Potential drug–drug interactions.
- Negative effects of using medications in ways other than as prescribed.

SBIRT is an indepth approach to screening and brief intervention with older adults who may exhibit at-risk drug use, misuse of prescription medications, or use of illicit substances.[879]

- **Screening** helps you quickly assess the severity of drug use or prescription medication misuse and identifies the right type and intensity of treatment.
- The **brief intervention** focuses on helping older adults increase awareness of their drug use or prescription medication misuse and motivation for changing health risk behaviors.
- **Referral to treatment** secures access to assessment and treatment by providers who specialize in addiction, when needed.[880] Providers can implement SBIRT in many settings, including behavioral health service programs and healthcare clinics.

Chapter 3 offers indepth discussion of SBIRT, research on its usefulness, and adaptations for older adults.

Treatment for OUD

Opioid Overdose Treatment

Because of physiological changes, older adults show higher blood concentrations of opioid metabolites. This results in greater substance potency, toxicity, and longer duration of action than in younger adults.[881,882] These factors may **increase older adults' risk of opioid overdose, which should be treated as a life-threatening emergency.**

Follow recommended guidelines for naloxone administration, and **offer overdose prevention education and emergency naloxone kits to clients, caregivers, and families in case of overdose.**[883,884]

Medically Supervised Opioid Withdrawal

Older adults are likely to have intense opioid withdrawal symptoms, especially related to chronic pain.

ACUTE CARE: MEDICAL STABILIZATION AND SUPERVISED MEDICAL WITHDRAWAL

Individuals must be medically and mentally stabilized if they:[885]

- Are acutely intoxicated.
- Are having an overdose.
- Are in withdrawal.
- Return to substance use.

Acute inpatient treatment may also be needed for individuals who:

- Are frail.
- Have multiple addictions.
- Have suicidal ideation.

Medically supervised withdrawal in a monitored or managed setting is recommended for older adults who have been taking high doses of a substance (e.g., opioids) or using for a long time. Inpatient treatment will ensure that individuals are medically monitored for a safe withdrawal process. This is especially important for older adults with co-occurring mental and medical conditions. Monitoring reduces risk of severe negative effects, including death, as older adults have more clinical risks related to withdrawal and medical stabilization.

Medication To Treat OUD

Three FDA-approved medications[886] can treat OUD in older adults:

- **Buprenorphine. Buprenorphine carries less risk for overdose than methadone.**[887,888] Buprenorphine's risk of respiratory depression or sedation is low,[889] and the medication doesn't produce the euphoria caused by heroin or synthetic opioids. Buprenorphine:
  - Is a good option for patients with repeated return to opioid use.
  - Is usually more convenient and cost-effective than methadone, because it can be provided in office-based settings by qualified physicians, NPs, physician assistants, and, until October 1, 2023, qualified clinical nurse specialists, certified registered nurse anesthetists, and certified nurse midwives.
  - Is available as an implant, in sublingual and transmucosal formulations, and as an injection. This makes it a **good option for older adults with mobility or transportation issues, as it reduces the need for frequent visits to the provider.**[890]

- **Methadone. Methadone can prevent opioid withdrawal symptoms and reduce drug cravings.** Methadone is available in almost every state from specially licensed opioid treatment programs. Methadone is a beneficial intervention.[891]
- **Naltrexone. Naltrexone is best for clients who want to stop all opioid use.** Research on naltrexone for OUD treatment in older adults is not readily available. It is less useful for individuals needing long-term medication maintenance therapy for SUDs or for those with chronic pain. Naltrexone must not be prescribed to individuals who are currently using opioid medications.

Nonopioid Treatments for Chronic Pain

Older adults may develop OUD because of chronic pain. Given the complexities of managing the care of older clients with chronic pain, a comprehensive treatment approach is recommended.[892] Chronic pain in older adults is best managed by a multidisciplinary team that includes (when possible) a:[893]

- Geriatrician.
- Rheumatologist.
- Physical medicine and rehabilitation physician.
- Psychiatrist or psychologist.
- Physical therapist.
- Occupational therapist.
- Pharmacist.

Nonpharmacological treatments can successfully treat chronic pain in older adults. These include:[894]

- Meditation.
- Relaxation.
- Cognitive–behavioral therapy (CBT).
- Exercise therapy.
- Physical therapy/occupational rehabilitation.

Exhibit 5.4 shows the general approach to managing chronic pain in older adults.

RESOURCE ALERT: VETERANS AFFAIRS CLINICAL DECISION TOOLS FOR OPIOID USE AND CHRONIC PAIN

The Department of Veterans Affairs/Department of Defense *Clinical Practice Guideline for Opioid Therapy for Chronic Pain* (www.healthquality.va.gov/guidelines/Pain/cot) describes the critical decision points in the management of opioid therapy for chronic pain. It provides clear and comprehensive evidence-based recommendations using current information and practices for practitioners throughout the Department of Defense and Department of Veterans Affairs healthcare systems. It includes special dosing considerations for older adults.

The *Opioid Safety Initiative Toolkit* (www.va.gov/PAINMANAGEMENT/Opioid_Safety_Initiative_OSI.asp), created by the Veterans Health Administration National Pain Management Program, can aid in clinical decisions about starting, continuing, or tapering opioid therapy and other challenges related to safe opioid prescribing. Clinical teams caring for older adult veterans with chronic pain may find this useful.

EXHIBIT 5.4. Chronic Pain Assessment and Treatment Approaches for Older Adults[895,896]

Assessment. An indepth assessment should review the client's:

- Cognitive and functional status.
- Social support.
- Co-occurring medical and psychiatric conditions and SUDs.
- History of pharmacological and nonpharmacological treatments.
- Current medication and alcohol use.
- ADLs. (See Chapter 3 for more information about assessing these.)
- Goals and hopes for treatment.

Treatment. An indepth approach should include:

- Building a treatment alliance with the older adult by asking about his or her preferences and goals.
- Providing consistent and prompt follow-up to a client's requests and phone calls.
- Providing backup coverage with providers who understand the unique treatment needs of older adults.
- Providing/actively linking the client to physical or occupational therapy and other community-based resources.
- Offering pharmacological (when needed) and other treatments (e.g., CBT, physical therapy, mindfulness).
- Using praise and positive reinforcement when the client meets treatment tasks and goals.
- When necessary, adapting treatment approaches to meet the needs of the older adult.
- Including family and caregivers in treatment planning and recovery/rehabilitation activities (with the older adult's permission).

If you are treating older adults with opioids for chronic pain, do not stop treatment suddenly. This can cause serious withdrawal effects. In addition, the return of pain may lead older adults to misuse or use other prescribed medications, alcohol, OTC medications, and illicit drugs. **The consensus panel recommends that you slowly titrate older adults off of opioids, while at the same time offering them other pharmacological and nonpharmacological treatment options.**

Treatment of Drug Use Disorders Other Than OUD

Benzodiazepines

Given the potential risks and harmful effects, medical providers are cautioned against prescribing benzodiazepines to older adults. If a benzodiazepine is needed, prescribe the lowest dose for the shortest amount of time. Harmful effects of benzodiazepines can include:[897]

- Residual sedation.
- Decreased attention.
- Decreased memory and cognitive function.
- Changes in motor coordination.
- Increased risk of falls.
- Drug dependence and withdrawal.
- Increased risk of car accidents.

Although life-threatening benzodiazepine overdoses are rare, the risk is higher in older adults because of age-related declines in medication metabolism. In the event of a benzodiazepine overdose, low doses of a benzodiazepine antagonist are safe for older adults.[898]

Medically supervised withdrawal from benzodiazepines for older adults should include:[899]

- Counseling.
- A stepped withdrawal schedule.
- Client education about benzodiazepine use and withdrawal.

Benzodiazepine withdrawal symptoms can be similar to alcohol withdrawal symptoms. Withdrawal symptoms can include anxiety, sleep disturbances, and life-threatening complications such as seizures. A gradual, tapered approach to medically supervised withdrawal is best.

Because older adults can have withdrawal symptoms even after taking the medication for relatively short periods of time, tapering should be gradual. It should last for a minimum of 4 weeks, although most clients need longer.[900] One study using a 22-week tapering protocol and education about the tapering process found that 27 percent of clients stopped taking benzodiazepines within 6 months, compared with 5 percent in the control group.[901] A review of 28 studies of older adults tapering off benzodiazepines reported positive outcomes and no serious harmful effects with tapering only (32 percent), tapering and CBT (32 percent), and tapering plus other medication (36 percent).[902]

Other Sedative-Hypnotics

Medical providers often prescribe sedative-hypnotic medication to older adults for insomnia. Sedative-hypnotics should not be first-line treatment for insomnia. Some older adults can benefit from benzodiazepines and other sedative-hypnotics as short-term solutions to sleep issues. However, **long-term use of these medications increases the risk of physical dependence. Be very cautious prescribing them to older adults** because of the increased risk of:[903]

- Memory impairment.
- Falls.
- Fractures.
- Car accidents.

The consensus panel discourages treatment of insomnia with sedative-hypnotics for more than 7 to 10 days. Patients need frequent monitoring and reassessment if treatment continues past 2 to 3 weeks. Intermittent dosing at the lowest possible dose is best. Prescribe no more than a 30-day supply.

SLEEP HYGIENE TO REDUCE INSOMNIA IN OLDER ADULTS

The aging process can cause changes in sleep that lead to increased awakenings during the night. Older clients who practice good sleep hygiene and receive CBT can retrain their bodies and brains for better, more restful sleep. Sleep-related best practices that combine principles of sleep hygiene with CBT include the following:[904,905,906,907]

- Avoid alcohol and caffeine, especially before bed.
- Take medications in the morning if possible, especially if they are stimulating or cause alertness.
- Don't take daytime naps.
- Follow a regular bedtime.
- Use the bedroom only for sleep and sexual activity; remove TVs, electronics, and items unrelated to sleep.
- Limit exercise to earlier in the day.
- Avoid heavy meals before bedtime.
- Learn relaxation techniques and use them before bed and during night wakening.
- If awake for 10 to 15 minutes, get out of bed and do something quiet and relaxing (e.g., read a book in some place other than bed). Go back to bed only when sleepy. This helps the brain link the bedroom to sleep only.
- Keep a sleep diary to track habits and changes in sleep over time.

Cannabis

The widening legalization, availability, and social acceptance of cannabis has led to more frequent recreational and medicinal use of this drug by older adults. Sometimes, this results in cannabis use disorder (CUD). According to DSM-5, CUD includes symptoms such as:[908]

- Taking cannabis in larger amounts or over a longer period than was planned by the person.
- Having an ongoing desire to cut down or control use or past unsuccessful efforts to do so.

- Failing to fulfill major role responsibilities at work, school, or home because of cannabis use.
- Experiencing tolerance or withdrawal.

Withdrawal symptoms can lead to a return to use and include:[909]

- Irritability.
- Depression.
- Anxiety.
- Sleep problems.
- Dysphoria (sad mood).

Evidence-based treatments for CUD are lacking for the general population and for older adults. More studies and interventions designed for older adults are needed.

The National Institute on Drug Abuse recommends three behavioral approaches to treat CUD:[910] motivational interviewing (MI), CBT, and contingency management.

Stimulants

Stimulant intoxication (e.g., from cocaine or amphetamines) is linked to mental symptoms (e.g., anxiety, agitation, psychosis) as well as autonomic hyperactivity (i.e., high blood pressure, rapid heart rate). Benzodiazepines or neuroleptics may be prescribed for withdrawal-related symptoms, such as agitation and sleep issues (e.g., insomnia, extreme sleepiness).[911] Other withdrawal symptoms can include:

- Depression.
- Irritability.
- Anxiety.
- Psychosis.

At this time, there are no FDA-approved, evidence-based pharmacological treatment options for individuals with cocaine use disorder[912] **and no approved treatments specific to older adults with stimulant use disorders.** However, some pharmacotherapies have shown success in adult populations, including disulfiram, bupropion, and naltrexone.[913] **CBT remains the gold-standard treatment for stimulant cravings and return to stimulant use.**[914]

Psychosocial Treatment Approaches

Psychosocial interventions are generally effective in reducing and even stopping drug use and prescription medication misuse. Some interventions, such as CBT, MI, and relapse prevention therapy, are effective for many types of drug use.[915] Medication treatments for drug use may be more effective in combination with psychosocial treatment, compared with either medication or psychosocial interventions alone.[916,917]

It is unclear which psychosocial treatments are most effective for older adults with drug use disorders. Some psychosocial approaches, like problem-solving therapy and CBT, have effectively treated older adults for other behavioral health issues (e.g., depression, tobacco addiction) that often co-occur with drug use disorders.[918,919,920] A systematic review found that older adults do as well as or better than younger adults across SUD treatment approaches.[921]

You can adapt standard psychosocial counseling methods for use with older adults by:

- Repeating information.
- Using a slower pace.
- Offering shorter sessions.
- Giving information in different ways (e.g., verbally, in large print) to match clients' level of physical and cognitive functioning.
- Using age-sensitive approaches with structured (not open-ended) questions. Such approaches are:
  - Supportive.
  - Nonconfrontational.
  - Responsive to gender/cultural differences.
  - Flexible (e.g., provide in-home or phone service for clients without transportation).
  - Focused on helping older adults learn/improve coping and social skills. (Chapter 4 of this TIP discusses CBT, MI, relapse prevention therapy, and problem-solving therapy treatment approaches for older adults in more detail.)

Age-Specific Treatment

Age-specific treatment approaches and practices help older adults seek, participate in, and complete treatment. Such approaches also improve older adults' treatment experience (Exhibit 5.5). Whereas some older adults benefit from mixed-age addiction treatment, those ages 75 and older or with more chronic co-occurring health conditions and functional limitations benefit from age-specific treatment.[922] Regardless of the treatment approach, older adults prefer age-specific, age-sensitive approaches that are nonconfrontational, person centered, and flexible.

Age-specific programming[923,924] improves treatment completion and improves older adults' 12-month rates of abstinence. It also results in higher rates of attendance at group meetings compared with mixed-age treatment. Age-specific programs that have been studied have featured:[925]

- An emphasis on individual and group counseling and community activities.
- Adaptations such as slower pace and accommodations for vision, hearing, and cognitive impairment.
- Special topic groups for older adults focusing on:
  - Grief.
  - Loss.
  - Isolation.
  - Physical health issues.
  - Recreation.
  - Life changes.
  - Purpose.
  - Support.
- An emphasis on the therapeutic alliance while using CBT and MI, and a 12-Step philosophy.

Exhibit 5.5 highlights important characteristics of age-specific treatment for older adults recommended by the consensus panel.

Referral Management and Care Coordination

Limited time and resources may keep you from treating older adults with drug use disorders. However, as part of care coordination, you should develop linkages with treatment providers who

EXHIBIT 5.5. Age-Specific SUD Treatment for Older Adults

Accessibility

- Use a larger font on print and electronic client screening, assessment, and educational materials.
- Offer adaptations for individuals with cognitive, vision, or hearing impairments.
- Offer transportation, in-home services, and telephone checkups.
- Offer a sliding scale for self-paying clients.
- Use adaptations for individuals with physical disabilities and problems getting around.
- When needed, supply linkages to:
  - Food, clothing, and shelter.
  - Specialized medical services.
  - Older adult-focused social services.
  - Employment services.
  - Financial and housing assistance.

Program Specific

- Use a nonconfrontational manner emphasizing the therapeutic alliance while using therapeutic approaches that have been shown to work with older adults (e.g., CBT, MI, problem-solving therapy).
- Focus on building self-esteem and coping skills.
- Use a slower pace and adaptations for vision, hearing, and mild cognitive problems.
- Offer individual, group, and family counseling.
- Offer special topic groups for older adults.
- Give individual counseling and one-on-one attention.
- Ensure that staff are trained in the unique concerns and treatment needs of older adults.
- Use gender-specific content.
- Offer counseling with providers who specialize in geriatrics.
- Offer age-specific linkages to services within the community.
- Offer peer recovery support services geared to older adults.

can do so and with other resources within the community.[926] (See "Resource Alert: Developing Referral Resources" in Chapter 2 of this TIP.) **Referring older clients to the right level of treatment and offering ongoing coordination of care are the keys to getting positive outcomes for older adults in addiction treatment.**

Effective referral starts with matching your referral to the client's stated goals and available resources. You must also address the client's outlook and hopes for the referral.

Once you make a referral, follow up with both the client and the other provider to make sure that the client is continuing in treatment. Work together with the other provider to offer ongoing care as needed. (See Chapter 4 of this TIP for more strategies for referral management and care coordination.)

Recovery Management

Recovery management is an organizing philosophy for addiction treatment and recovery support services. Recovery management can help individuals and family members participate in treatment and achieve long-term recovery.[927] Not everyone who uses illicit substances or misuses prescription medication needs ongoing recovery management support. However, **some older adults may need ongoing monitoring and recovery support,** especially if they have co-occurring medical conditions or mental disorders, experience social isolation, or receive little support from family and friends.[928]

Continuing care interventions that suit older adults and positively affect addiction treatment include:

- Home visits.
- Telephone counseling.
- Recovery checkups.
- Active linkage to community resources, such as recovery support groups.

Offering case management services and including supportive family members in the older adult's treatment can also support ongoing recovery. (See also the "Family Involvement" section.)

Case and Care Management Services

Case and care management (CCM) services can help older adults reduce health-related risks of drug use or prescription medication misuse. The CCM approach to addiction treatment is broad. It addresses clients' overall health and connects them to recovery resources within the community, such as NA and AA. CCM services focus on getting clients into addiction treatment programs when needed and linking them to other services, like:

- Housing support.
- Employment services.
- Financial services.
- Specialty medical treatment.

CCM services are commonly available in community-based agencies, healthcare offices, and residential or long-term care facilities.[929] Addiction treatment programs and comprehensive behavioral health programs also may have care coordination and resource linkage services, which are increasingly offered by peer recovery support specialists.

CCM models can help older adults enter and stay in treatment, possibly because this approach seeks to reduce feelings of shame older adults often feel about entering treatment, and it provides support to the individual. CCM does this by focusing on older adults' overall health rather than just their drug use.[930,931] CCM strategies should help older adults gain access to age-related resources in the community that support recovery.[932,933]

Family Involvement

Involving family throughout treatment and ongoing recovery can help improve older clients' chances of staying in addiction treatment. It can also improve treatment outcomes. Family members:

- Often make first contact with treatment services.
- Can motivate the older adult to participate in treatment.

- Can help the older adult overcome barriers to access.
- Can help the older adult with the difficulties of the medical and specialized addiction treatment systems.
- Can provide important details about the client's history of and current substance use.

With the client's permission, involve family members and caregivers who support the older adult's recovery efforts:

- In the initial evaluation of the older adult.
- Throughout treatment.
- During ongoing recovery support.
- In posttreatment recovery plan development.

Although family members and caregivers can be key in providing support, they may also feel shame related to their family member's drug use disorder. You can help them feel more open to being involved by stressing that addiction is a chronic illness, like heart disease, and reminding them of the confidential nature of treatment. Without meaning to, sometimes family members exacerbate the older adult's drug use or prescription medication misuse by helping him or her get access to illicit substances or supporting the misuse of prescribed medication. Family members may benefit from psychoeducation, delivered in a nonjudgmental way, about the health risks of drug use and prescription medication misuse. (See Chapter 4 of this TIP for more information about family involvement in treatment and caregiver support resources.)

Mutual-Help Groups

Twelve-Step recovery support groups offer community-based support for individuals who have drug use disorders, including people who are in continuing care following brief interventions or specialized addiction treatment.[934] A growing body of research suggests that mutual-help group participation improves long-term recovery, psychosocial outcomes, and self-efficacy.[935,936] However, no systematic studies address outcomes for older adults. Even so, **mutual-help group participation may improve recovery and help older adults reduce social isolation, shame, and the effects of discrimination associated with drug use disorders.**[937]

The key to linking older adults to mutual-help groups is finding available resources in your community and matching clients to specific groups that may be a better fit for older adults. For example, when an older client cannot easily access an NA meeting, the client may benefit from attending AA meetings instead.[938] Older clients may feel more comfortable going to AA than NA, where participants are typically younger and use multiple substances.[939]

Key elements of 12-Step groups that are especially well suited to older adults include:[940]

- General social support, goal direction, and structure.
- Participation in substance-free social activities.
- Activities to improve participants' self-efficacy and coping skills.

These strategies can help you link older clients to community-based recovery support groups:

- Become familiar with age-friendly mutual-help groups available in your community.
- Contact local support group offices and ask which meetings are accessible to people with disabilities and have active members who are older adults.
- Ask groups to provide contact information for older adult members who can act as temporary sponsors or provide transportation.
- Link clients to peer recovery support specialists in your own organization or in the community.
- Urge older clients to attend several different meetings before they decide whether mutual help is something they want to pursue, because each meeting has its own tone and feeling.

RESOURCE ALERT: SMART RECOVERY

SMART stands for Self-Management and Recovery Training. SMART Recovery is a network of local and online abstinence-focused addiction recovery support groups based on evidence-supported principles of CBT and MI approaches, which are appropriate for treating older adults. Unlike AA, NA, and Cocaine Anonymous, SMART Recovery meetings are run by trained volunteers and do not include a spiritual component. The SMART Recovery website (www.smartrecovery.org) offers information about SMART Recovery principles and training opportunities, including how to become a facilitator for meetings. It includes a searchable database of local and online meetings. You can also learn more about SMART Recovery in Chapter 4 of this TIP.

Clinical Scenarios

The clinical cases that follow give examples of substance misuse by older adults and ways to apply clinical interventions in these situations. Interventions and treatments can range from PCPs asking the older adult about personal use of substances (e.g., benzodiazepines, cannabis, cocaine, alcohol use with medication misuse or illicit substance use) to inpatient addiction treatment. The level of intensity of interventions and treatments for older adults depends on:

- The substance used.
- The level of use.
- Effects on and risks to client.

Clinical Scenario: Benzodiazepine Misuse and Polypharmacy

For many older adults, the relationship with their PCP is often one of their strongest and most stable. Visits to their PCP provide an opportunity to screen for substance use and misuse, including substance use related to late-life changes (e.g., retirement, moving, grieving a death). **This scenario demonstrates thorough screening of a new client and strategies for problem-solving and referral.**

- **Sedative, Hypnotic, or Anxiolytic Use Disorder:** An older adult woman becomes physically dependent on benzodiazepines after long-term use and increases her health risk by taking benzodiazepines with other sedative-hypnotic medications.
- **Treatment Setting:** Outpatient healthcare clinic
- **Providers:** PCP; clinical social worker (CSW)
- **Treatment Strategies:** Screen for alcohol misuse; discuss history of sedative use; provide information on risks of taking substances together; explore tapering off benzodiazepines; refer to CSW who uses CBT strategies for anxiety; follow up with the client.

Joan is a 70-year-old widow who has two grown children who live far away from her. She started to have significant anxiety in her 50s, when the company she worked for closed and her job ended. She was never able to look for or find a job again. At that time, she was prescribed a benzodiazepine by her PCP and she has taken it for many years. In the past year, her husband died, and she moved from her house to an apartment because she could not afford to stay in the house. She became more anxious and started taking extra doses of the benzodiazepine. Her sister also has a benzodiazepine prescription and has given Joan extra pills when she runs out, which happens more often lately. Joan has arthritis pain, making sleep difficult. To help with this, her doctor prescribed sleeping pills on a short-term basis. Joan stopped drinking alcohol when her husband stopped drinking 10 years before his death.

Her long-term PCP retired recently—another significant loss for Joan. She started seeing a new PCP at the same group practice after the nurse care manager reached out by phone to set up an initial consultation. Her new provider is screening all new clients for a variety of health behaviors. The PCP asks Joan about her alcohol use and notes that she has been taking benzodiazepines for more than a decade. Joan states, "I have been taking Xanax for years for my 'nerves.' It made it easier for me to go to social events and church after Jake died." Joan also says that the pills make it a little easier to sleep but that she has recently had to take more sleeping pills to get any sleep at all. Joan likes her new doctor, so she is willing to talk

about her benzodiazepine dosage. She discusses how she gets some extra pills from her sister because she runs out before the prescriptions are ready to be filled and starts to feel "bad."

At this meeting, the new PCP discusses Joan's anxiety and, in a nonjudgmental way, gives information about the risks of taking benzodiazepines for a long time, taking more than prescribed, and adding sleeping pills to the mix. She says, "You know, many people who take this medication for a long time, even as prescribed, start to need a higher dose just to keep the anxiety at bay or then add a sleeping pill because the tranquilizer isn't working anymore. There are some options we can talk about that could help you feel better without all of this medication. Can we discuss some options and figure out together what might work best for you?" Joan says that she would like not to have to take so many pills, and she worries that if her sister isn't around, she won't be able to get more tranquilizers from her.

The PCP and Joan discuss several options, including a long-term taper from the benzodiazepines, and work together to find the best option for Joan. The PCP explains the tapering process and explains how Joan can manage anxiety and sleep problems as she tapers off the medication. Initially, Joan is a bit nervous about tapering off the medication but agrees to this option after the PCP reassures her that she will work closely with her to make sure the taper is adjusted correctly for her situation.

The PCP then asks Joan whether she would be willing to talk to the clinic's social worker about connecting with age-friendly activities in the community and learning to manage her anxiety without medication. Joan says "yes." The PCP walks Joan over to the social worker's office and introduces Joan to her. They set up an appointment for an initial visit.

The social worker is trained in CBT strategies to manage anxiety and introduces them to Joan at her initial visit. In their next session, the social worker discusses with Joan how the CBT is affecting her ability to manage anxiety. The social worker continues to see Joan weekly. Each week, Joan gets a structured, between-session assignment and a quick telephone reminder about practicing the exercise.

CBT FOR ANXIETY AMONG OLDER ADULTS

A review of psychosocial treatments for anxiety among older adults found that CBT had the strongest research support.[941] The authors reported that CBT could be even more useful for older adults when adapted to their needs. Some of these adaptations include:[942]

- Simpler CBT interventions.
- Between-session reminder phone calls.
- A weekly review of concepts discussed.
- At-home assignments.

The social worker also helps Joan connect with social activities she enjoys. With support, Joan feels she can improve how she feels physically and emotionally. Her PCP is in contact with Joan's social worker and sees Joan on a regular basis to assess how well the taper is going and whether it needs adjustment.

Clinical Scenario: Use of Opioids and Alcohol for Pain Management

When older adults taking pain medication use alcohol, they can experience additional negative health effects. Older adults who live in retirement communities and long-term residential care facilities often find themselves in social situations where drinking is supported.[943] Visits to the PCP provide a chance to screen for alcohol misuse as well as offer new options for pain management. **This scenario demonstrates screening thoroughly before prescribing additional pain medication, educating clients on the dangers of using alcohol with medication, and providing nonpharmacological pain management strategies.**

- **OUD and Alcohol Misuse:** An older adult living in a retirement community who drinks to socialize becomes physically dependent on opioids after surgery.
- **Treatment Setting:** Outpatient healthcare clinic
- **Providers:** PCP; NP

- **Treatment Strategies:** Screen for prescription drug and alcohol use; discuss current health status of the client; provide information on risks of using alcohol while taking opioids; perform initial brief interventions; suggest physical therapy and a tapering program; conduct multiple follow-up brief interventions and calls with the client.

Louise is a 75-year-old retired middle school teacher who is married. She and her husband, a retired high school principal, just celebrated their 50th wedding anniversary. They have a son, a daughter, and three grandchildren. For the past 5 years, they have lived in a retirement community. They have made friends in the community and take part in activities, including golf, exercise classes, card games, and book clubs. Many of these events include alcohol. In addition, the community sponsors regular happy hour gatherings at the clubhouse that Louise and her husband also attend.

One month ago, Louise had knee replacement surgery. She began taking opioids for pain in the hospital and was sent home with a prescription so that she could continue to use the medication during rehabilitation. She was still having pain during the day, with greater pain at night. To add to the effects of the opioids and make them "go further," she drank wine at the usual get-togethers with friends and had additional drinks in the evening before bed. A neighbor, Pat, had prescription opioids from a past surgery. She offered them to Louise to help "tide her over" until she saw her doctor. Louise waited to make an appointment until she was almost out of her neighbor's opioid medication.

Louise makes an appointment with her PCP to see whether she can get more pain medication. She tells her PCP that the pain is not going away, and that she is almost out of medication. The PCP talks with Louise about her pain and screens for amount and frequency of alcohol use and medication use. He discovers that she is drinking while taking the opioids and has been using more opioids than recommended. He then gives her nonjudgmental feedback about the results of the screens. He says, "Based on your answers to my questions about your alcohol use and use of pain medication, it looks like you are at risk for some serious health problems if you continue drinking alcohol and taking medication in this way. We know that when people your age drink and take the kind of pain medication you are on, they can have problems with their breathing, ability to move around, or memory. Are any of those happening to you?" Louise starts to become concerned and responds, "You know, I have been getting more confused about things lately and feeling like I sometimes have a hard time breathing easily. But I am worried about the pain and how I will manage without pain medicine or extra alcohol."

The PCP acknowledges her concerns by stating that maintaining her health and level of activity is important. The PCP asks whether she would be willing to work with him and an NP to come up with a plan to manage her pain while lowering the health risks she faces by drinking and using pain medication at the same time. Louise says, "Well, what's most important to me is to get my knee in good shape again."

The PCP supports Louise's goal and calls in the NP, who is trained in giving substance-related brief interventions and has worked with other clients to help them cut back on alcohol and reduce or stop their use of opioids. The NP schedules Louise for two face-to-face meetings and two follow-up phone calls between visits. She and Louise develop a treatment plan that includes Louise going to physical therapy and a rehabilitative exercise class in her community to help her knee heal and improve her range of motion so she can get back to golfing with her group. Louise also agrees to keep track of her alcohol use and to follow an opioid taper plan over the next month to get off the pain medication.

Clinical Scenario: Screening, Assessment, and Referral to Addiction Treatment

Older adults with a history of substance misuse have increased risk of return to substance use when they have additional stressors (e.g., injury, divorce, family conflict). Heavy substance use also leads to many health problems; these are often the primary reason a client seeks treatment or winds up in the ED. A study found that SBIRT in an ED setting was a factor in reducing substance use at follow-up, suggesting that an ED visit for another medical

problem may be a "turning point" for many individuals with substance misuse concerns.[944] **This scenario shows the importance of the ED as a setting for screening, assessment, and referral; it also demonstrates strategies providers can use to take advantage of "teachable moments" with clients.**

- **Cannabis and Alcohol Misuse:** An older adult with a long history of alcohol and cannabis misuse has co-occurring medical conditions.
- **Treatment Setting:** ED of a community hospital
- **Provider:** ED attending physician
- **Treatment Strategies:** Get the client medically stable; order a blood test screen for alcohol; order a urine screen for cannabis; discuss the current state of the client; provide information on the risks of using alcohol with cannabis; conduct a brief intervention; recommend short-stay, inpatient detoxification and treatment followed by outpatient care.

Walter is 69 years old and divorced. He lives with his girlfriend. He has an adult son and a granddaughter. Walter likes to hunt and fish with his male friends but has little other social contact. Walter had some problems with alcohol when he was younger, including being arrested for driving under the influence. He cut back on drinking but started smoking cannabis daily. After he got married, he stopped using cannabis and drank only occasionally for several years. He started drinking heavily and smoking cannabis again after an on-the-job back injury in his early 50s. He divorced 10 years ago and retired the next year. He met Sally, his long-term girlfriend, 5 years ago. Walter drinks heavily and uses cannabis daily. In the past year, there have been many times when he did not remember what he did when he was intoxicated. His girlfriend used to enjoy smoking cannabis and drinking with him, but as he increased his use, she is no longer comfortable living with him and has threatened to move out if he keeps using.

Walter has been having some health problems, including high blood pressure, diabetes, and chronic back pain. He sometimes forgets to take his medications. He was stopped by the police for unsafe driving recently but was not arrested.

In addition, he had a falling out with his son and daughter-in-law. They do not want him spending time with his granddaughter because he is often drunk and high.

A week later, he starts drinking and smoking cannabis when he wakes in the morning and continues to use all day, passing out in the late afternoon. When he awakens a few hours later, he has chest pain, nausea, and sweating. Worried of a heart attack, his girlfriend takes him to the ED. The attending physician sees him immediately, takes a medical history, and orders lab tests to rule out a heart attack. However, a blood draw shows his blood alcohol level is 0.18. A urine screen is positive for cannabis. The ED physician then performs a more indepth screen and assessment of Walter's substance use history and, with Walter's permission, invites Sally to discuss the effects of Walter's drinking and cannabis use.

Once Walter is less intoxicated, the ED physician talks with him about his medical status. In a nonjudgmental and nonconfrontational tone, he says, "Walter, the good news is that you did not have a heart attack. Based on your other lab tests, your age, and other medical conditions and what you and Sally have told me about your drinking and cannabis use, I want you to think about a short stay at an inpatient treatment program so you can get a handle on your substance use." At first, Walter is not sure, but then Sally supports him. He then says, "I feel so sick, and thinking I was having a heart attack really scared me. I guess it's the best thing for me to do." The ED physician introduces Walter and Sally to the nurse care manager and assures them that she can answer any questions they have about the treatment process and will help transfer his care to the inpatient program.

Clinical Scenario: Polysubstance Misuse With Co-Occurring Medical Conditions

More and more older adults with a history of illicit drug use, particularly heroin and cocaine, are being admitted to inpatient addiction treatment programs.[945,946] Cocaine use in older adults is related to multiple medical problems, including higher rates of high blood pressure, breathing issues, heart attack, stroke, and cognitive

impairment.[947] Older adults with a long history of polysubstance misuse (misuse of multiple substances at the same time) and co-occurring medical conditions are at risk for return to substance use and lack of follow-up for medical conditions after inpatient treatment. **This scenario demonstrates referral management and ongoing recovery support strategies for an older adult with a history of polysubstance misuse and co-occurring medical conditions.**

- **Polysubstance Misuse:** An older adult has a history of misuse of heroin and cocaine.
- **Treatment Setting**: Inpatient detoxification and rehabilitation program
- **Provider:** Licensed alcohol and drug counselor (LADC) on a multidisciplinary treatment team
- **Treatment Strategies:** Offer referral and recovery management strategies before discharge.

Hal is 74 years old and never married. He started using heroin as a soldier in the Vietnam War. After discharge from the service, he started using cocaine to stay awake during his night shift at the post office. His drug use stayed about the same for many years but increased after he retired. He lives alone, and his social life includes playing poker with friends on Thursdays. During a recent game, Hal had numbness in his arm and slurred speech. One of his buddies brings him to the ED. Hal is having a mild stroke. After he is medically stabilized, Hal enters an extended-care inpatient SUD treatment program. After 8 weeks of treatment, Hal meets with his primary counselor to discuss his continuing care plan.

ADAPTING RESIDENTIAL CARE FOR OLDER ADULTS

Because many older adults have problems getting around, upon admission to residential and inpatient programs, older adults can benefit from being paired with a "senior buddy" to help them learn the facility and move from one treatment activity to another.[948]

The counselor opens the conversation by saying, "Hal, you've done really well in treatment. You've participated fully in therapy and educational groups here and have a solid plan to keep yourself from relapsing and to help you cope with any triggers to use once you go home." Hal responds, "Thanks. It's good to hear that you think I've been doing well. Frankly, I was kind of anxious when I was first admitted to the program. It really helped that you paired me up with Bill to show me the ropes."

The counselor says, "Let's talk about your goals for ongoing recovery." Hal says he doesn't want to go back to using but worries that he has no recovery support back home. He says, "My poker buddies all drink and smoke pot. Even though that wasn't my thing, I think that will be a trigger to use again. I liked the NA meetings a lot, but I live in a really small town, and there aren't any NA meetings nearby."

Hal's counselor had already contacted the AA central service office closest to Hal and gotten the names and contact information of an older AA volunteer who would be willing to help Hal get to meetings and act as a temporary sponsor. The counselor says, "I already talked to Jerry. It turns out he is a Vietnam vet, too." Hal says that talking to someone who has "been there" would be a big help to him.

Hal and his counselor talk about other recovery management options, like linking with a counselor and a continuing care group at an outpatient SUD treatment program nearby and getting Hal an appointment with a PCP who can provide medical care. The counselor tells Hal of a recovery checkup program with a peer recovery support specialist who will call him regularly to see how he is doing and whether he needs linkage to other community resources. The counselor will provide a "warm handoff" by introducing Hal to the specialist before discharge. Hal says, "That sounds great. It will be nice to have that connection to the rehab." Hal and his counselor write down his continuing care plan and all contact information. His counselor says, "Your homework is to call the AA contact and schedule a meeting after your discharge on

Thursday. Mine is to make referrals to the PCP and outpatient addiction counseling program." Hal is satisfied with the recovery plan and motivated to follow through and continue his recovery program.

Summary

Widespread screening, brief intervention, and referral and recovery management are essential to the successful treatment of drug use and prescription medication misuse, including drug use disorders, in older adults. Whatever specific treatment method or strategy you use when working with older adults who have drug use disorders, make sure it is nonconfrontational and age sensitive. Ongoing recovery management strategies increase the chance that improvements will continue over time and not only help older adults reduce negative drug-related health and behavioral outcomes, but also improve the quality of their lives.

Chapter 5 Resources

Provider Resources

National Council on Aging—Resources (www.ncoa.org/audience/professional-resources/?post_type=ncoaresource): This resource provides a searchable database of articles, webinars, and manuals.

Consumer Resources

FindTreatment.gov (https://findtreatment.gov): People seeking treatment for SUDs can use this federal locator maintained by SAMHSA to find treatment facilities based on location, availability of treatment for co-occurring mental disorders, availability of telemedicine care, payment option, age, languages spoken, and access to medication for OUD. The site also links to information on understanding addiction, understanding mental illness, and paying for treatment.

SAMHSA—Behavioral Health Treatment Services Locator (https://findtreatment.samhsa.gov/): SAMHSA offers people seeking treatment for addiction or mental illness a confidential, anonymous information source about treatment facilities in the United States and U.S. Territories.

SAMHSA's National Helpline (www.samhsa.gov/find-help/national-helpline): The National Helpline is a free, confidential, 24/7, 365-days-a-year treatment referral and information service (in English and Spanish) for people facing mental disorders and SUDs. The toll-free phone number is 1-800-662-HELP (4357) or 800-487-4889 (TTY).

Faces & Voices of Recovery—Guide to Mutual Aid Resources (https://facesandvoicesofrecovery.org/resources/mutual-aid-resources): Visitors can find a listing of mutual-help group contact information.

Chapter 6—Substance Misuse and Cognitive Impairment

KEY MESSAGES

- Substance misuse can increase the risk of having cognitive problems as an older adult.
- Screening for mental disorders that co-occur with substance misuse and can negatively affect cognition is very important. Doing such screening will help you quickly get clients the substance use disorder (SUD) treatment, mental health services, and medical evaluation they need.
- Treatment should be offered as needed for the full scope of problems facing an older client. Treatment should address a client's substance misuse; co-occurring mental conditions, including depression or anxiety; and cognitive impairment.

Chapter 6 of this Treatment Improvement Protocol (TIP) will most benefit providers. It will help them understand how to screen, diagnose, and treat older clients who misuse substances and have, or are at risk for, cognitive problems. Changes in how people think and how their brains work are normal parts of getting older and vary a lot from person to person. But some age-related cognitive changes are abnormal, such as Alzheimer's disease. However, for older adults who misuse substances, difficulties with cognition and other brain functions can be more serious. Older individuals are more sensitive than younger and middle-aged adults to the negative effects of drugs and alcohol on the brain.[949] This puts older people who misuse substances at increased risk for certain problems with thinking (also called cognitive impairment or cognitive disorders), such as dementia and delirium.

Who Can Benefit From Chapter 6 of This TIP and How?

Chapter 6 of TIP 26 is for behavioral health service, healthcare, and social service providers who provide care to older adults who misuse substances. Such providers include physicians and other healthcare professionals, psychiatrists, psychologists, counselors, social workers, drug and alcohol counselors, and other behavioral health workers, such as peer recovery support specialists.

Screening, diagnosis, and treatment of older clients who misuse substances and have cognitive problems may require help from many different types of providers. One type of provider may screen; another may make the diagnosis; yet another may treat the client or work with the client's caregiver.

If you work with older adults in any setting, you are likely seeing more and more older clients who misuse substances. **Chapter 6 will support you in decreasing your clients' chances of developing dementia and other cognitive problems by helping them address substance misuse and adopt healthier lifestyles.[950,951] Chapter 6 will help you:**

- **Teach older clients** about risks of cognitive disorders related to substance misuse, such as dementia.
- **Understand why you need to screen older clients who misuse substances** for cognitive impairment, as well as conditions that co-occur with substance misuse and increase the risk for cognitive problems. These include depression, anxiety, and posttraumatic stress disorder (PTSD).

- **Refer older clients** with cognitive impairment for further cognitive testing and evaluation to make sure they receive the correct diagnosis.
- **Offer treatments** for SUDs, co-occurring mental disorders, and cognitive disorders, including education, drug and alcohol counseling, mental health services, referral for medication treatment, or a combination of these.
- **Work with caregivers** of older clients who misuse substances, have cognitive disorders, or both. Caregivers often need help improving their own coping and stress management skills. This is important because when caregivers suffer, the care they give can suffer too.

Organization of Chapter 6 of This TIP

Chapter 6 covers education, screening, assessment, and treatment of older adults who misuse substances and may also have, or be at risk for, cognitive impairment.

The first section of Chapter 6 discusses how common substance misuse is in older adults. Many people think substance misuse is "just a young person's problem." But this is not true. This section will help you understand the importance of offering substance-related screening and treatments.

The second section addresses whether substance misuse causes cognitive problems in older people. The findings from research studies are not always clear. But what is clear is why you need to look for cognitive problems in older clients who misuse substances and how you can do that.

In the third section, you will learn more about mental disorders that commonly occur in older clients who misuse substances and can negatively affect their thinking. These include depression, anxiety, and PTSD. If untreated, these conditions can also make a client's substance misuse worse. Similarly, untreated SUDs can make these co-occurring mental disorders worse.

The fourth section offers recommendations on how to help older clients who misuse substances reduce their chances of developing cognitive problems through screening, assessment, and treatment (or referral to treatment). Screening and assessment are discussed in more detail in Chapter 3 of this TIP (which includes many of the actual screening measures you can use in your program).

The fifth section guides you in helping caregivers of older clients who misuse substances and have cognitive difficulties. Caregivers face many struggles and are often in great need of information and resources—not only to help your older clients but also to help themselves.

The final section offers resources to support your program and resources to share with your clients and their family members. More detailed resources are in Chapter 9 of this TIP.

The Appendix presents two screening instruments: one for depression and another for PTSD. For definitions of key terms you will find in Chapter 6 of this TIP, see Exhibit 6.1.

EXHIBIT 6.1. Key Terms

- **Addiction*:** The most severe form of SUD, associated with compulsive or uncontrolled use of one or more substances. Addiction is a chronic brain disease that has the potential for both recurrence (relapse) and recovery.
- **Alcohol misuse:** The use of alcohol in any harmful way, including heavy drinking, binge drinking, and alcohol use disorder (AUD).
- **At-risk/high-risk drinking:** Drinking alcohol in excessive amounts. This definition encompasses both binge drinking and heavy drinking. Additionally, any alcohol consumption is considered risky when

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carried out by individuals with certain medical conditions that are worsened by alcohol, those taking medicine that can interact harmfully with alcohol, those driving a car or engaged in other activities that require alertness, or people recovering from AUD.[952,953] Note that for purposes of this TIP, at-risk drinking and high-risk drinking are synonymous and either term is acceptable to describe an older adult's drinking patterns.

- **AUD:** The fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) defines this disorder.[954] An AUD diagnosis is given to people who use alcohol and meet at least 2 of the 11 DSM-5 symptoms in a 12-month period. Key aspects of AUD include tolerance, withdrawal, loss of control, and continued use despite negative consequences. AUD covers a range of severity and replaces what the previous edition of DSM termed alcohol abuse and alcohol dependence.
- **Binge drinking:** A drinking pattern that leads to blood alcohol concentration levels of 0.08 grams per deciliter or greater. This usually takes place after four or more drinks for women and five or more drinks for men.[955,956] However, older adults are more sensitive to the effects of alcohol, and treatment providers may need to lower these numbers when screening for alcohol misuse.[957] Additionally, other factors such as weight, decrease in enzyme activity, and body composition (e.g., amount of muscle tissue present in the body) can also affect alcohol absorption rates.
- **Caregivers:** Informal caregivers provide unpaid care. They assist others with activities of daily living (ADLs), including health and medical tasks. Informal caregivers may be spouses, partners, family members, friends, neighbors, or others who have a significant personal relationship with the person who needs care. Formal caregivers are paid providers who offer care in one's home or in a facility.[958] Most older adults do not need caregivers and are as able to address their own needs as younger adults, whether or not substance misuse is a factor in their lives.
- **Cognitive disorders:** Problems in cognition that are not a normal part of aging. These problems include difficulties with memory, attention, using and understanding language, thinking and reacting quickly, solving difficult problems, or a combination of these. Dementia and MCI are examples of cognitive disorders.
- **Delirium tremens:** A temporary state of confusion that can occur during alcohol withdrawal. If untreated, some symptoms, such as unstable heart rate and seizures, can be life threatening.
- **Dementia:** A brain disorder in which problems with cognition get worse over time. Problems with cognition are serious enough that people need help with activities of everyday living (e.g., bathing, getting dressed, and feeding themselves). In DSM-5, dementia is known as major neurocognitive disorder.
- **Drug–drug interaction:** The interaction of one substance (e.g., alcohol, medication, an illicit drug) with another substance. Drug–drug interactions may change the effectiveness of medications, introduce or alter the intensity of side effects, and increase a substance's toxicity or the concentration of that substance in a person's blood. Potentially serious interactions can also occur with certain foods, beverages, and dietary supplements.[959]
- **Hazardous drinking:** Alcohol use that increases the risk of future harm.[960]
- **Heavy drinking:** Consuming five or more drinks for men and four or more drinks for women in one period on each of 5 or more days in the past 30 days.[961]
- **Illicit substances:** Illicit substances include cocaine, heroin, hallucinogens, inhalants, methamphetamine, and prescription medications that are taken other than as prescribed (e.g., pain relievers, tranquilizers, stimulants, sedatives).
- **MCI:** A mild brain disorder that is similar to dementia. With MCI, problems with thinking are present but are not severe enough for people to need help with their everyday activities. In DSM-5, MCI is known as mild neurocognitive disorder.
- **Moderate drinking:** According to the 2015–2020 *Dietary Guidelines for Americans,* moderate drinking is defined as up to two drinks per day for men and up to one drink per day for women.[962,963] However, the

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Centers for Disease Control and Prevention (CDC) notes that these numbers apply to any given day and are not meant as an average over several days.[964] Additionally, individuals who don't metabolize alcohol well may need to consume even lower quantities. Some people, particularly those with certain alcohol-related illnesses or engaging in tasks requiring concentration, should not consume alcohol at all. The *Dietary Guidelines* stipulate that those who don't drink should not begin drinking for any reason.[965]

- **Mutual-help groups:** Groups of people who work together on obtaining and maintaining recovery. Unlike peer support (e.g., the use of recovery coaches or peer recovery support specialists), mutual-help groups consist entirely of people who volunteer their time and typically have no official connection to treatment programs. Most are self-supporting. Although 12-Step groups such as Alcoholics Anonymous and Narcotics Anonymous are the most widespread and well researched type of mutual-help groups, other groups may be available in some areas. They range from groups affiliated with a religion or church (e.g., Celebrate Recovery, Millati Islami) to purely secular groups (e.g., SMART [Self-Management and Recovery Training] Recovery, Women for Sobriety).
- **Peer support:** The use of peer recovery support specialists (e.g., someone in recovery who has lived experience in addiction plus skills learned in formal training) to provide nonclinical (i.e., not requiring training in diagnosis or treatment) recovery support services to individuals in recovery from addiction and to their families.
- **Psychoactive substances:** Substances that can alter mental processes (e.g., cognition or affect; in other words, the way one thinks or feels). Also called psychotropic drugs, such substances will not necessarily produce dependence, but they have the potential for misuse or abuse.[966]
- **Recovery*:** A process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential. Even individuals with severe and chronic SUDs can, with help, overcome them and regain health and social function. This is called remission. When those positive changes and values become part of a voluntarily adopted lifestyle, that is called being in recovery. Although abstinence from all substance misuse is a cardinal feature of a recovery lifestyle, it is not the only healthy, prosocial feature.
- **Relapse*:** A return to substance use after a significant period of abstinence.
- **Remission:** A medical term meaning a disappearance of signs and symptoms of the disease or disorder. DSM-5 defines remission as present in people who previously met SUD criteria but no longer meet any SUD criteria (with the possible exception of craving).[967] Remission is an essential element of recovery.
- **Substance misuse*:** The use of any substance in a manner, situation, amount, or frequency that can cause harm to users or to those around them. For some substances or individuals, any use would constitute misuse (e.g., underage drinking, injection drug use).
- **Substance use disorder*:** A medical illness caused by repeated misuse of a substance or substances. According to DSM-5,[968] SUDs are characterized by clinically significant impairments in health and social function and impaired control over substance use. They are diagnosed through assessing cognitive, behavioral, and psychological symptoms. SUDs range from mild to severe and from temporary to chronic. They typically develop gradually over time with repeated misuse, leading to changes in brain circuits governing incentive salience (the ability of substance-associated cues to trigger substance seeking), reward, stress, and executive functions like decision making and self-control. Multiple factors influence whether and how rapidly a person will develop an SUD. These factors include the substance itself; the genetic vulnerability of the user; and the amount, frequency, and duration of the misuse. Note: A severe SUD is commonly called an addiction. A mild SUD is generally equivalent to what previous editions of DSM called substance abuse; a moderate or severe SUD is generally equivalent to what was formerly called substance dependence.

* The definitions of all terms marked with an asterisk correspond closely to those given in *Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health.* This resource provides a great deal of useful information about substance misuse and its impact on U.S. public health. The report is available online (https://addiction.surgeongeneral.gov/sites/default/files/surgeon-generals-report.pdf).

Substance Misuse in Older Adults

Substance misuse in older people is increasing,[969] yet it is often overlooked and underaddressed by providers.[970,971] Older clients may not feel comfortable telling you about their substance misuse or asking for help. This is problematic, as older people are more likely than younger or middle-aged people to experience negative effects from alcohol, drugs, and prescription medications.[972,973]

Healthcare, behavioral health service, and social service providers can have difficulty noticing substance misuse in older clients. This is partly because most older adults who misuse substances do not meet all DSM-5 criteria for an SUD. For example, tolerance is a key diagnostic criterion of an SUD. But because of the aging process, older adults have a lower tolerance for alcohol and other substances than younger people. Thus, although tolerance in an older person is still a sign of substance dependence, it looks different in older adults than in younger individuals.

Chapter 1 of this TIP provides information and statistics about overall substance misuse, misuse of specific substances, and effects of substance misuse among older adults. The following sections in this chapter of the TIP provide a brief summary of this information.

Alcohol Misuse

Older adults use alcohol more than any other substance.[974,975] In 2019, 52.8 percent of people ages 60 to 64 years and 43.9 percent of people 65 and older were estimated to have used alcohol in the past month,[976] and **3.4 percent of adults 50 and older had AUD.**[977]

Alcohol misuse differs between older men and older women. For example, women tend to feel the negative effects of alcohol after having fewer drinks than is the case for men.[978] They may be more vulnerable to the effects of alcohol misuse—a concerning fact, given that drinking rates (including for binge drinking) are increasing more rapidly among older women than older men.[979]

Misuse of Other Substances

Although most older adults do not use illicit substances, some do. For example, according to data from 2019,[980] SUDs involving illegal drugs occurred in approximately 390,000 adults ages 50 to 54; 271,000 adults ages 55 to 59; 282,000 adults ages 60 to 64; and 227,000 adults ages 65 and older.

Prescription medications are some of the most commonly misused substances among older adults in the United States. Prescription medication misuse involves taking a medication other than as prescribed, whether accidentally or on purpose. Some older adults use prescription medications to "get high," but many misuse prescription medications by mistake to address sleep problems, chronic pain, or anxiety. **Pain relievers are the most commonly misused prescription medication among older adults.**[981]

Exhibit 6.2 describes classes of prescription medication.

EXHIBIT 6.2. Understanding Classes of Medications

Most of your older clients will be taking at least one prescription medication. Many clients take more than one. Be sure you are familiar with the different types of medication classes. This will help you better understand the potential cognitive effects and drug–drug interactions related to the medications your clients are taking. Common medication classes include:[982]

- **Sedative-hypnotics,** which are often prescribed for sleep problems or anxiety. They include barbiturates (e.g., amobarbital, secobarbital) and benzodiazepines (e.g., lorazepam, alprazolam). Sometimes the term "tranquilizer" is used to describe antianxiety medications such as benzodiazepines.
- **Opioid analgesics,** which are prescribed to treat pain. Opioid analgesics work by attaching on opioid receptors in the brain. Examples include oxycodone and hydrocodone/acetaminophen.
- **Nonopioid analgesics,** which people take to control pain. But these pain medications do not act on opioid receptors in the brain. Examples include aspirin and acetaminophen.
- **Stimulants,** which help people feel alert or full of energy. Examples include amphetamine/dextroamphetamine and methylphenidate.

Between 11 and 18 percent of older adults, depending on age range, report using tobacco in the past month.[983] These numbers are troubling because, in adults ages 65 and older, smoking is associated with more than double the chances of binge drinking and triple the chances of illicit drug use or prescription medication misuse.[984]

The true population rate for benzodiazepine misuse by older adults is unknown. The American Geriatrics Society notes that although at times prescribing benzodiazepines to older adults may be appropriate, these medications may be potentially inappropriate for some older individuals. These medications increase the risk of falls and fractures, car accidents, problems with cognition, substance misuse and dependence, and death.[985,986]

It is unclear how many older adults use cannabis with a prescription, how many use it recreationally in areas where doing so is legal, and how many misuse it (whether through using recreationally in areas where it is illegal or by misusing prescription cannabis). **Cannabis may seem harmless, but in some older adults it may be linked to memory and thinking problems,** AUD and nicotine use disorder, and co-occurring mental disorders like depression, anxiety, bipolar disorder, and PTSD.[987,988]

Effects of Substance Misuse

Older adults are more likely than younger and middle-aged adults to feel the negative physical effects of medications, illicit drugs, and alcohol. In older people:[989]

- It takes longer for organs (e.g., liver, kidneys) to remove the alcohol and drugs from the body.
- With less lean body mass and total body water, older people can become intoxicated on even small amounts of a substance.
- The central nervous system is more sensitive to the effects of drugs and alcohol.
- Harmful drug–medication interactions are more likely. (See, for example, "Resource Alert: Preventing Dangerous Alcohol–Medication Interactions.") Older adults often take more than one medication. Harmful drug–medication interactions are associated with negative events such as:[990,991,992]
  - Injury (e.g., falls).
  - Breathing problems.
  - Sleeping problems.
  - Cognitive changes.
  - Seizures.
  - Internal bleeding.
  - Dangerous changes in blood pressure.
  - High or low blood sugar levels.
  - Overdose, which can be fatal.
  - Suicide and self-harm.
- Alcohol misuse can increase an older person's risk of injury, including those from:[993,994,995,996]
  - Falls.
  - Traumatic brain injury.
  - Car accidents.
  - Experiencing violence or abuse firsthand.
  - Suicide and nonsuicidal self-injury.
- Binge drinking on 5 or more days in the past month can increase the risk of certain physical conditions and mental disorders or make them worse. Such conditions include:[997,998,999,1000]
  - Depression.
  - Cancer.
  - Diabetes.
  - High blood pressure.
  - Heart failure.
  - Sleep difficulties.

RESOURCE ALERT: PREVENTING DANGEROUS ALCOHOL–MEDICATION INTERACTIONS

Older adults are at high risk for dangerous alcohol–medication interactions. Learn more about commonly used prescription and over-the-counter medications and how they interact with alcohol in the National Institute on Alcohol Abuse and Alcoholism's (NIAAA) publication *Harmful Interactions* (www.niaaa.nih.gov/publications/brochures-and-fact-sheets/harmful-interactions-mixing-alcohol-with-medicines).

Additionally, the Substance Abuse and Mental Health Services Administration (SAMHSA) publication *Get Connected: Linking Older Adults with Resources on Medication, Alcohol, and Mental Health* discusses the dangers of older adults misusing alcohol and prescription and over-the-counter drugs. It describes the signs of misuse and steps that older adults can take to prevent problems (https://store.samhsa.gov/product/SMA03-3824).

Links Between Substance Misuse and Cognitive Disorders

You will note that this section addresses the cognitive effects of alcohol misuse in far greater depth than it does the cognitive effects of other substance misuse. This is because most research on substance misuse and cognitive disorders focuses on alcohol. Research on the relationship between cognitive disorders and other substances, such as cocaine and cannabis, is still new, somewhat mixed, and inconclusive. This section does address benzodiazepines and tobacco, but in less detail.

The brain undergoes certain changes with age, like the shrinkage of white and gray matter tissue and decreased blood flow.[1001,1002] Because of these alterations, people sometimes experience changes in thinking as they age. Examples of normal age-related changes in thinking include:[1003]

- Having trouble recalling information without cues or reminders, such as not remembering what was on a shopping list when the list is not in front of the individual.
- Being unable to remember where a piece of information was heard or learned. Was it in the newspaper? Did someone mention it? Was it on television?
- Forgetting to perform activities, such as not remembering to turn off the kitchen light before going to bed.
- Having problems remembering the names of common objects.

Remember that aging differs across individuals, and whether someone experiences age-related changes in cognition depends on many factors.

Alcohol and Cognition

The link between alcohol use and problems with cognition in later life is complex. The effects of alcohol on a person's health are influenced by many factors, including how much and how often a person drinks, as well as by genetic and family-related factors. Social, cultural, and environmental factors can also affect a person's misuse of alcohol. These include such factors as:[1004]

- Exposure to alcohol consumption through television, movies, magazines, and social media.
- Experience of hardships related to immigration and cultural adjustment to life in the United States.
- Cultural norms related to drinking.
- Community environment, including level of violence, neighborhood housing conditions, and number of liquor stores in the community.

- Involvement with family, friends, or peers who misuse alcohol, raising the potential for misuse as a "learned behavior" adopted through attempts to imitate the drinking patterns of others.

Alcohol misuse is harmful to overall health[1005] and can increase the risk of dementia.[1006] It can also negatively affect certain areas of cognition, like memory.[1007,1008] **Drinking too much alcohol can damage the brain** (as well as the liver, heart, and other organs).[1009,1010] Older adults may be more likely than younger adults to experience harm to the brain and body caused by heavy drinking:[1011,1012]

- Heavy alcohol use can damage older adults' ability to:[1013,1014]
  - Learn new information.
  - Recall information.
  - Speak and understand language.
  - Solve problems.
  - Think and react quickly.
- Heavy alcohol use can lead to negative physical changes in the brain. For instance, too much alcohol can cause brain cells and tissues to shrink or no longer work as they should.[1015]
- Even lower levels of alcohol use can sometimes harm the brain of middle-aged and older adults,[1016] including areas of the brain that control memory.[1017]

What amount of alcohol harms a person's thinking? There is no one right answer. The amount that is harmful can differ from person to person. Alcohol can affect a person's cognition, no matter how little they drink. Clients need not have a problem with alcohol for it to have significant effects on their thinking. Do not make the mistake of thinking only people with AUD are at risk for cognitive problems like dementia and MCI.

Dementia and MCI

Does alcohol misuse cause or increase the risk of dementia or MCI? The answer is unclear, especially for Alzheimer's disease.[1018] Part of the problem is that different studies define terms such as "alcohol consumption," "light to moderate drinking," and "heavy or excessive drinking" differently.

Some studies have found a negative link between alcohol and cognitive disorders. For instance, research has found that:

- Heavy drinking can increase the risk of Alzheimer's disease.[1019]
- Heavy drinking, especially binge drinking, can increase risk of cognitive problems in later life.[1020,1021]
- Light-to-moderate drinking can increase the risk of MCI turning into dementia.[1022]
- Heavy drinking as a young adult can increase the risk of certain types of dementia later in life.[1023]
- Middle-aged adults who drink often (i.e., several times per month) may be more than twice as likely to have MCI in older adulthood as people who do not drink often (i.e., less than once per month). This risk appears to be even higher in people who have genes that increase their chances of developing Alzheimer's dementia (e.g., the APOE e4 gene).[1024]

What happens when people who already have dementia, MCI, or other problems with cognition drink alcohol? It depends on how much they drink and other individual factors. For instance, which if any medications are they taking? Are they at risk for dementia because of their genetic background? Consider the following:

- Heavy alcohol use can be toxic to the brain. People with dementia or MCI are already struggling with their thinking. Adding alcohol to the situation can potentially worsen their cognitive problems.
- Alcohol use can worsen dementia symptoms (e.g., lack of interest in people or activities).[1025]
- Clients with cognitive problems may forget how much they drank, raising risk for drinking too much.

What should you as a provider tell your older clients about alcohol misuse and their risk of cognitive problems? First, remember that definitions, methods, and research questions differ

among studies. This makes it difficult to know the true relationship between alcohol and risk of dementia or MCI. However, that does not mean that you should take this risk lightly.

Here are some important points you can make when discussing with older clients their risk of developing cognitive problems because of alcohol misuse:

- Heavy alcohol use damages the brain, heart, liver, and other organs.[1026,1027]
- Older people are more likely than younger people to feel alcohol's negative effects.[1028,1029] So even light or moderate drinking can be more harmful to the brain.
- Drinking habits and biological factors differ from person to person. For instance, people who drink wine may be at less risk from light-to-moderate drinking than people drinking other alcoholic beverages. People who do not have genes that elevate their risk for dementia (such as the e4 allele of the APOE gene) may be at less risk from light-to-moderate drinking than others who are at high genetic risk for dementia.[1030]

HOW MUCH ALCOHOL IS "HEALTHY"?

How "safe" or "healthy" is alcohol truly? A 2018 systematic analysis tried to answer this question by estimating the risk of alcohol consumption levels to health among people in 195 countries.[1031] The study authors found that alcohol contributed greatly to disability and deaths, owing to its connection to conditions such as:

- Tuberculosis.
- Cancer.
- Cardiovascular disease.
- Stroke.
- Diabetes.
- Accidental injuries.
- Self-harm.
- Interpersonal violence.

The study authors state that, based on their findings, any amount of alcohol use, even minimal, can lead to loss of health. Although they found some beneficial effects of alcohol consumption for heart disease and diabetes among women, these benefits were outweighed by the health risks, especially those of cancer, infectious diseases, and injuries.

"The widely held view of the health benefits of alcohol needs revising," the authors write. "Our results show that the safest level of drinking is none" (p. 1026).

The TIP consensus panel recommends that you counsel older clients on the possible dangers of alcohol misuse, especially heavy alcohol use and possible alcohol–medication interactions. If you screen a client for alcohol misuse, you should also screen him or her for cognitive impairment.

Delirium Tremens

People who drink heavily are at risk for a life-threatening condition called delirium tremens (or alcohol withdrawal delirium). Delirium tremens is different from delirium. **Delirium** is a cognitive disturbance in which people become confused and disoriented. Delirium can occur in older people who have recently undergone surgery or are taking multiple prescription medications, or who are experiencing common but serious medical conditions such as infections or dehydration.[1032,1033,1034]

Delirium tremens is a serious and potentially deadly consequence of alcohol withdrawal. In fact, it is the most serious adverse effect of alcohol withdrawal. **Symptoms of delirium tremens could be mistaken for signs of dementia.** Dangerous symptoms can include:[1035,1036]

- Hallucinations.
- Confusion (or disorientation).

- Rapid heart rate or high blood pressure.
- Sweating.
- Nausea or vomiting.
- Seizures and tremors.

Behavioral health service and healthcare providers should stay alert for symptoms of delirium tremens when treating older clients with alcohol withdrawal. About 3 to 5 percent of people hospitalized for alcohol withdrawal have delirium tremens.[1037] Without treatment, delirium tremens can be deadly because of serious complications like heart arrhythmias.[1038] Thus, it often requires treatment in intensive care.

Alcohol-Related Dementia

Long-term heavy drinking can directly cause alcohol-related dementia (ARD).[1039] ARD occurs in up to a quarter of older people with AUD and is more likely to be diagnosed in men.[1040] Little scientific evidence exists on the amount, length, and severity of alcohol use that leads to ARD.[1041] Some researchers believe that ARD develops because of a lack of vitamin B1 (thiamine)[1042] and the direct neurotoxic effects of ethanol.[1043] To confirm a diagnosis of ARD, refer the client to a neuropsychologist or neuropsychiatrist for indepth cognitive testing.

WERNICKE–KORSAKOFF SYNDROME

Wernicke–Korsakoff syndrome (WKS) includes both Wernicke's encephalopathy and Korsakoff syndrome—two brain disorders linked to lack of vitamin B1 (thiamine). Heavy alcohol use is often the cause of WKS, but physical conditions, such as cancer, can also cause it.[1044]

WKS is sometimes called **alcohol-induced persisting amnestic disorder.** Three main symptoms occur in WKS: problems with eye movement, confusion, and an inability to control muscle movements (also called ataxia), such as when walking. WKS is rare, occurring in about 1 percent of the general population. WKS is much more common in people with AUD, but prevalence rates vary widely.[1045]

In some ways, WKS is similar to ARD. Both appear to be caused in part by a lack of vitamin B1. Both conditions can improve after clients stop using alcohol, start taking vitamin B1, or both. People with WKS can have such behavioral symptoms as loss of interest in all activities (called apathy) and restlessness, mood symptoms (e.g., depression, anxiety), and psychotic symptoms (e.g., hallucinations, delusions).[1046] To confirm a diagnosis of WKS, you will need to refer the client to a neuropsychologist or neuropsychiatrist for cognitive testing.

Benzodiazepines and Cognition

Compared with older people who have never used benzodiazepines, older adults who have used them[1047] **(ever, recently, previously, or for long periods of time) appear to have a higher risk of dementia.** Older people with long-term use (i.e., greater than 3 months) of benzodiazepines may be 1.5 to 2 times more likely to develop dementia as people who have not used them long term.[1048] The risk of dementia with benzodiazepine use appears to grow as the dose of benzodiazepine increases.[1049]

Offer older clients who have taken benzodiazepines for a long time or have taken a high dose of these medications cognitive screening to assess problems in their thinking. (See Chapter 3 for cognitive screening measures.) **Assessment of memory and cognitive functioning should be part of the annual exam of all older adults.** High-dose or long-term use of benzodiazepines is an appropriate reason to perform cognitive screening, whether or not the older client asks for it, because older clients, especially those with cognitive impairment, may not realize that they need this screening.

The American Geriatrics Society cautions that benzodiazepines are potentially inappropriate in most older clients, but also notes that their use may be appropriate in certain limited circumstances, such as for seizure disorders.[1050] (See text box on the American Geriatrics Society 2019 Beers Criteria® for Potentially Inappropriate Medication Use in Older Adults.) **Consider whether older clients who take benzodiazepines need referral for a medication switch.** Cognition may improve following the switch to alternative medications or with a gradual reduction in dosage of these medications.

In addition to understanding the problems related to benzodiazepines, **determine whether there have been any changes or additions to the client's medications.**

Medications contraindicated or causing adverse reactions and complications may temporarily impair cognition or exacerbate existing MCI.

The American Geriatrics Society Beers Criteria® list medications that are potentially inappropriate for older adults because the risks often outweigh the benefits. At the time of this publication, the 2019 Beers Criteria® are the most recent.[1051] Clients taking medications in the brief list that follows (which is drawn from the full Beers Criteria®) should be referred to a healthcare provider to discuss possibly switching medications:

- Certain antidepressants (e.g., amitriptyline, nortriptyline)
- First-generation (older) and second-generation (atypical) antipsychotics
- Barbiturates (e.g., phenobarbital, secobarbital)
- Short-, intermediate-, and long-acting benzodiazepines (e.g., alprazolam, clonazepam)
- Certain pain medications (e.g., ibuprofen, naproxen)

The 2019 Beers Criteria® also newly recommend avoiding concurrent use of benzodiazepines and prescription opioids, while stating that concerns about interactions should be weighed against the need to treat chronic pain.

Note that the Beers Criteria® list medications that are **potentially** but not **definitely** inappropriate. For more on how to properly apply the recommendations, see this editorial in the *Journal of the American Geriatrics Society:* https://onlinelibrary.wiley.com/doi/epdf/10.1111/jgs.15766.

Tobacco and Cognition

A recent study found that people who currently smoke cigarettes were much more likely to have dementia (any type) than people who had never smoked.[1052] Interestingly, people who formerly smoked had the same risk of dementia as people who never smoked. **This means that stopping tobacco use could be powerful in reversing the risk of dementia.** Research findings from four large studies appear to confirm the harmful relationship between smoking and increased risk of dementia.[1053,1054,1055,1056] However, more research is needed to explore this relationship. That said, tobacco use is known to cause many serious negative health problems. You should counsel all clients who use tobacco to quit.

RESOURCE ALERT: GOING SMOKE FREE

For free support in helping your clients quit tobacco, call 1-800-QUIT-NOW (1-800-784-8669) and visit https://smokefree.gov.

For tips on quitting tobacco use from former smokers, direct your clients to this CDC webpage: www.cdc.gov/tobacco/campaign/tips/index.html.

Substance Misuse and Co-Occurring Mental Disorders That Affect Cognition

Some older adults who have mental disorders also misuse substances.[1057] For instance, in older adults, alcohol misuse often co-occurs with depression.[1058,1059] In older people, depression is associated with problems with reported memory, attention, problem-solving, and the ability to think and react quickly.[1060] According to data from the National Survey on Drug Use and Health, an estimated 1.7 million older adults (ages 50 and above) in the United States had a co-occurring mental disorder and SUD in 2019.[1061]

Treatment rates for older people with co-occurring conditions are low. Estimates from 2019 showed that just 9.6 percent of people 50 and older with any mental illness and a past-year SUD received substance misuse services at an SUD treatment facility as well as mental health services.[1062] One reason for the undertreatment of co-occurring disorders (CODs) in older adults is that **CODs tend to be overlooked and underdiagnosed.**[1063]

Older adults with CODs tend to use more behavioral health services than do older adults without CODs. Even so, they are at risk for negative health and psychosocial outcomes, including:[1064,1065]

- Thoughts of suicide and of death in general.
- Some medical issues (e.g., liver disease).
- Severe symptoms of depression.
- Being divorced, separated, or widowed.

Substance misuse often makes the symptoms of a co-occurring mental disorder worse and harder to treat. For example, substance misuse can worsen cognitive symptoms of co-occurring mental disorders. Just like substance misuse, mental disorders can lead to difficulties with cognition. Cognitive symptoms can make it harder for older adults to recognize their substance misuse,[1066] which could reduce likelihood of seeking SUD treatment.

Substance misuse, co-occurring mental disorders, and cognitive disorders are all related to one another. And they all have similar symptoms. If an older client has any one of these conditions, screen for all three. (Screening measures for these conditions appear in Chapter 3 of this TIP.) Major depressive disorder (MDD) and generalized anxiety disorder (GAD) often co-occur with substance misuse in older adults and negatively affect the brain. PTSD is less common in older people than MDD and GAD, but it does occur, especially in older military veterans. Be alert for these disorders in older clients who misuse substances and have cognitive difficulties.

MDD and Depressive Symptoms

MDD and depressive symptoms are both risk factors for and outcomes of substance misuse in older adults. In fact, MDD is one of the most commonly co-occurring mental disorders of older clients who misuse substances.[1067] A recent meta-analysis found that one in four people with dementia had clinically significant depressive symptoms.[1068] In a large sample of older adults with alcohol misuse, 29.7 percent reported having symptoms of depression.[1069] In this same study, rates of depression were especially high among older adults with two or more chronic health conditions (such as heart disease or diabetes). In these adults, alcohol misuse was five times more common in those with depression than in those without depression.

Whether MDD is a risk factor for dementia is unclear. It is also unknown whether having depression **and** substance misuse causes more cognitive problems than just having depression **or** substance misuse, but not both.[1070] Some research suggests that a relationship does exist between depression and cognitive disorders.[1071] For example:

- Adults with depression that starts earlier in life are at double the risk for dementia than adults who do not have depression.[1072]
- People with late-life depression are at a higher risk of certain types of dementia.[1073]

Depression is not a normal part of aging. Do not ignore even mild symptoms of depression in older clients.

- In one study, 70 percent of women ages 85 and older with depressive symptoms were diagnosed with MCI within 5 years, and 65 percent had dementia.[1074]
- Dementia risk seems higher in people with more frequent and severe depressive episodes.[1075]

Anxiety Disorders

About 10 to 15 percent of older adults meet criteria for an anxiety disorder.[1076,1077] Among the most common anxiety disorders in older people are GAD and specific phobias.[1078] In Wave 2 of the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), prevalence of any past-year anxiety disorder among adults ages 55 and older was 11.4 percent, that of GAD was 2.8 percent, and that of specific phobias was 5.8 percent.[1079]

Older adults with anxiety may be at an increased risk of substance misuse.[1080] Older adults living in the community, as well as those in SUD treatment, have higher rates of comorbid mental disorders, including anxiety, than older adults without substance misuse.[1081] In an analysis of data from Waves 1 and 2 of NESARC,[1082] older adults with a past-year SUD had a significantly greater chance of also having persistent anxiety compared with older adults without an SUD. The risk of substance misuse in older people with anxiety may be even higher for older women.[1083]

Anxiety symptoms in older adults can increase the risk of cognitive problems, especially with memory and learning.[1084] Anxiety disorders are also linked to other conditions that can affect cognition, including depression[1085] and substance misuse.[1086]

In a 2018 meta-analysis, the overall prevalence of clinically significant anxiety among people with dementia was 14 percent.[1087] Compared with depression, less is known about anxiety as a risk factor for dementia. Even so, the evidence shows:

- Among individuals newly diagnosed with dementia, about 31 percent previously had an anxiety diagnosis, compared with only 14 percent of older adults without dementia.[1088]
- An anxiety disorder almost triples the risk of dementia.[1089]
- People who have anxiety and depression are about 2.85 times more likely to have dementia.[1090]
- Anxiety appears to be a major predictor of cognitive problems in general and of dementia specifically.[1091] This may be especially true for many older adults (ages 80 and older).
- When older adults with anxiety have cognitive problems, these problems are often with memory, attention, and problem-solving abilities.[1092]

PTSD and Trauma

Older people are at risk for PTSD and substance misuse, although the rate of PTSD in older people is low. For instance, in Wave 2 of NESARC, 3.5 percent of adults ages 55 and older were reported to have past-year PTSD.[1093] In another study that also looked at Wave 2 data from the same survey, about 22 percent of adults ages 60 and older who met some but not all criteria for PTSD had an SUD, and 27 percent of older adults who met full criteria for PTSD had an SUD.[1094] Older adults who met at least some criteria for PTSD had 1.6 times greater chances of having an SUD than older adults who met no PTSD criteria.

It is unclear how common PTSD is in people with dementia. A meta-analysis examining rates of mental disorders among people with dementia noted a lack of research on PTSD specifically.[1095] Based on very limited studies, the authors estimated the overall prevalence of PTSD in dementia to be 4.4 percent.

Older adults who are military veterans also may be at risk for co-occurring PTSD and substance misuse. In a systematic literature review of studies about older veterans with PTSD, the prevalence of co-occurring SUDs ranged from about 1 percent to 11 percent.[1096]

Take the time to learn whether older clients who misuse substances also have a history of trauma or abuse. (Please refer to "Screening for PTSD, Trauma Symptoms, and Abuse" in Chapter 3 of this TIP for additional information.) **Also determine whether PTSD is present**. A trauma-informed approach to the screening, assessment, and care of older clients who misuse substances can help

put clients at ease. It will create a setting in which clients are more likely to open up and share with you the details of their trauma. You can take a trauma-informed approach by:[1097,1098]

- Making sure clients feel safe in your program—both physically and mentally.
- Using a gentle and warm attitude.
- Staying open and nonjudgmental. This builds trust among providers, staff members, clients, and family members.
- Working with your clients in a cooperative, shared way to make treatment decisions together. This helps empower clients and reminds them that they have a voice in the care process.
- Letting clients know that it is normal and healthy to express emotions, whether positive or negative. This is especially useful with older clients because older adults may be more likely to shy away from discussing negative feelings or traumas. They may be more likely to talk about physical symptoms rather than emotional ones or to dismiss traumas as "normal" parts of life.[1099]
- Being responsive to racial, ethnic, and gender disparities that may affect your clients' health. Realize that clients may have specific needs in these areas that can be addressed in the healing process.
- Offering peer support and referral to mutual-help programs. Working with someone who understands the lived experience of trauma and PTSD can be powerful for clients.
- Remembering to screen and assess clients for mental disorders and other conditions that co-occur with PTSD or trauma, such as depression and substance misuse.

How Providers Can Help

To help older adults with cognitive or co-occurring mental disorders related to substance misuse:

- **Educate older clients and their caregivers about the definitions and facts** on co-occurring mental disorders and cognitive problems related to substance misuse. This includes making sure clients and caregivers understand that the "safest" level of alcohol use is none at all. No amount of alcohol will be safe for older clients who take certain medications, have certain health conditions, or engage in certain activities (see Chapter 4).
- Screen older clients who misuse substances for co-occurring mental health conditions such as depression, anxiety, and PTSD.
- **Screen older clients who misuse substances (especially alcohol) for co-occurring cognitive impairment**. Older clients who take high doses of benzodiazepines or have been taking benzodiazepines long term also should be screened for cognitive problems.
- **Interview clients, caregivers, and practitioners** (with clients' permission) to determine whether changes in medications are leading to, or worsening, cognitive impairment.
- **Offer clients drug and alcohol counseling, mental health services, or both, as appropriate.** If your program does not offer these services, refer clients to a local program that does—and, if possible, to one that is experienced in working with older clients who misuse substances.
- **For clients who screen positive for cognitive problems, give referrals** for full cognitive assessments, which should include indepth cognitive testing. Only behavioral health service providers with specific training and experience can give these tests (a neuropsychologist or neuropsychiatrist).
- Offer resources and mental health services (or referrals for services) as needed to older clients who misuse substances, have cognitive disorders, or both; make such offers to their caregivers as well, if needed.

The U.S. Preventive Services Task Force recommends that healthcare providers screen for unhealthy alcohol use in adults ages 18 years or older and provide those who show risky or hazardous drinking with "brief behavioral counseling interventions" to reduce unhealthy alcohol use (www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryDraft/unhealthy-alcohol-use-in-adolescents-and-adults-screening-and-behavioral-counseling-interventions).

Screening for CODs and Cognitive Disorders

Older clients in need of treatment or already in treatment for SUDs should be screened for disorders that co-occur with SUDs, such as depression, anxiety, and PTSD, as well as cognitive disorders.

Screening Instruments

This section discusses several screening measures for depression, anxiety, PTSD, trauma/abuse, and cognitive problems. Some age-appropriate measures appear in the Chapter 6 Appendix and the Chapter 3 Appendix.

Consider your scope of practice before delivering these instruments. You may need training before you can give certain ones to clients. This is especially true for cognitive measures. Make sure you understand how to administer each instrument properly, how to interpret the score, and what follow-up is needed based on the score. If no one in your program can help you get the training you need, refer the client to another behavioral health service or healthcare provider who can perform the screening.

Screening instrument for cognitive disorders

For a client who may have cognitive impairment, use the Mini-Cog©. See Chapter 3 for a description of and link to this instrument.

Screening instruments for depression

Screen older clients who misuse substances, have cognitive disorders, or both for depression. Depression commonly co-occurs in older people who misuse substances.[1100,1101] This TIP discusses two well-researched depression screeners approved for use in older clients:

- The Geriatric Depression Scale–Short Form (15 item).
- The nine-item Patient Health Questionnaire.

Screening instruments for anxiety

Older adults with anxiety are at increased risk for substance misuse, especially alcohol misuse and tobacco use.[1102] You can screen for anxiety using the:

- Geriatric Anxiety Scale.
- Penn State Worry Questionnaire.

These measures have been approved for use with older adults.[1103,1104]

Screening instruments for PTSD, trauma, and abuse

PTSD or a history of trauma or abuse can increase the odds that an older person will misuse substances.[1105] **In addition to asking older clients about their current and past history of trauma and abuse, use brief screening measures to further explore this area.** For instance, you can use the:

- PTSD Checklist for DSM-5.
- Primary Care PTSD Screen for DSM-5.

To screen for possible abuse, give the Elder Abuse Suspicion Index©.

Interventions for Substance Misuse and Co-Occurring Mental/Cognitive Disorders

Healthcare and behavioral health service providers have several options for helping older clients who misuse substances and have depression, anxiety, PTSD, or cognitive problems:

- **Educate clients about substance misuse,** its effects on older people, and what "safe" or "nonrisky" use means. For some older clients, education alone helps them end their substance misuse.
- **Provide drug and alcohol counseling to help clients reduce or stop their use of substances.** If your program cannot offer specialized addiction services, make a referral to another local program that can. (Learn more about AUD treatment and drug use disorder treatment for older adults in Chapters 4 and 5 of this TIP, respectively.)
- **Brief counseling approaches,** such as motivational interviewing, can help older adults reduce substance use.[1106] Brief approaches can be adapted to clients' level of cognitive impairment.[1107]

- Find out whether your client has an interest in **other nonmedication treatments, such as therapy that involves art, music, or animals.** Some research suggests that these "alternative" therapies can help people with dementia reduce their anxiety, restlessness, and apathy.[1108,1109,1110]
- **Help your clients live healthier lives**. A healthy lifestyle may help slow the rate at which cognitive problems get worse over time. For instance, you can:[1111,1112]
  - Encourage clients to **stay physically active** through light exercise (e.g., walking, yoga, stretching programs).
  - Remind clients that mental activity is just as important as physical activity. Offer them ways to **stay mentally active** through reading, using computers/the Internet, or doing crossword puzzles and other "brain games."
  - Offer behavioral techniques to help clients who are not getting enough **quality sleep** each night (like teaching good sleep hygiene and providing advice on reducing nighttime stimuli).[1113]
  - Encourage clients to **spend time socializing** with family, friends, and close others as well as develop social networks (for clients who do not already have or use them).
  - Teach clients the importance of a **healthy diet** that meets their nutritional needs. A healthy diet can improve other physical problems affecting cognition (e.g., high blood pressure, obesity).
  - Support clients' efforts to **reduce or stop substance use;** give information and interventions related to tobacco cessation.
  - Find out whether clients have **hobbies or interests** that remain enjoyable. If not, help them identify pleasant activities to try to improve their quality of life and lift their spirits.
- **Make referrals to healthcare providers** who can work with clients and their caregivers to decide whether medication treatment is needed. Medication treatment may be useful for certain types of SUDs, such as AUD, tobacco use disorder, and opioid use disorder. (See Chapters 4 and 5 for more information.) Medications may also be useful for cognitive problems. They cannot cure dementia, but they may be able to help reduce some of its symptoms.[1114]
- Be supportive and positive for your clients. One way to do this is by referring them to **peer recovery or mutual-help groups,** such as Seniors in Sobriety. (See "Chapter 6 Resources.") These groups can increase clients' chances of achieving long-term abstinence, plus help keep clients socially active. Keep on hand a list of local peer recovery support programs to present to clients.
- Supply informational materials in your program's waiting room and meeting rooms (e.g., bulletin board or display case flyers, brochures, handouts) and offer these resources to your clients.

Addressing Caregiver Concerns

Many people provide unpaid care to older adults with whom they have a personal relationship. These caregivers, typically significant others like family members, friends, and neighbors, provide a wide range of services and supports to older adults, including:[1115,1116]

- Help with ADLs, such as bathing, dressing, eating, toileting, and transferring (in and out of a wheelchair, for instance).
- Help with instrumental ADLs, such as transportation, housework, food preparation, shopping, using communication devices, and managing finances.
- Emotional and spiritual support.
- Financial help.
- Shared housing.
- Help with communication and advocacy with service providers.
- Help with navigating service systems.
- Help with decision making related to healthcare and financial matters.
- Monitoring of health problems.
- Medication administration and monitoring.
- Medical/nursing tasks, like injections, tube feeding, and care of catheters, colostomies, and wounds.

Caregivers may carry out these activities intermittently, part time, or full time, including from a distance.

The physical, mental, emotional, and financial challenges of these caregiving responsibilities can result in "caregiver burden."[1117] Caregiving for older adults who misuse substances, have cognitive disorders, or both can be very stressful. This stress can make it hard for caregivers to function well at work, maintain social relationships, and take care of themselves.[1118]

Behavioral health service, healthcare, and social service providers need to be alert for caregiver stress. Stress can negatively affect the quality of attention the caregiver gives to your client. For instance, caregiver stress has been linked to a higher risk of elder abuse.[1119] Also, caregiver stress is associated with higher mortality.[1120] And caregivers may themselves be at risk for developing chronic health conditions such as high blood pressure, heart disease, and back pain.[1121] Caregiver stress may even lead to caregiver substance misuse. Caregivers who feel high levels of stress may need behavioral health services to build better coping skills, access resources, address their concerns, and improve their mood.

Caregivers may not tell you outright that they are feeling stressed or frustrated. Make a point to **ask caregivers directly about any difficulties they are having, including mental and physical symptoms. Here are some examples of questions you can ask** to help caregivers open up:

- "I know caring for your wife must be very difficult. How are you holding up?"
- "What do you do for fun or to 'let off steam'?"
- "Who do you turn to when you need support?"
- "Have you spoken with other caregivers who care for someone with dementia? Many caregivers find it very helpful to talk to someone who really 'gets it.' May I give you some information about local caregiver support groups?"
- "Are you familiar with Al-Anon? Many adult children of people with alcohol addiction find their meetings useful. Would you like me to give you their contact information?"

Helping Caregivers of Clients Who Misuse Substances

Caregivers may not always see the alcohol or drug use as a problem. They may feel guilty asking the person to stop using. Comments like the following are not unusual:

- "My George has had a beer after work every night for 40 years. I'm not telling him to stop now."
- "It's none of my business if she has a couple of glasses of wine. At her age, what's the harm, really?"
- "I feel bad asking my brother to stop smoking. His cigars are his one last pleasure in life."

Many caregivers may think that substance use is harmless. But for aging adults, that is not necessarily true. You can help caregivers by:

- **Sharing facts about alcohol or drug use in older adults** and the importance of avoiding illicit drugs, prescription medication misuse, and harmful drug–drug interactions.
- **Teaching them new coping skills** and offering interventions. This could include:
  - **Helping caregivers share their feelings of stress or concern with your older clients.** Talking to older adults about their substance misuse can be hard. You can help caregivers learn how to express their thoughts and feelings in a way that is healthy and helpful.
  - **Teaching caregivers better ways to handle your older clients' upsetting behaviors.** Some older adults who misuse substances can "act out," become angry, or behave in ways that are stressful to caregivers. Teach caregivers how to better manage these intense emotions and behaviors.
  - **Offering caregivers mental health services or referral to treatment.**
- **Helping them find peer recovery support groups** (e.g., caregiver support groups).
- **Encouraging them to join support groups.** Refer them to local mutual-help groups for family members of people who misuse substances, like Al-Anon and Adult Children of Alcoholics.

Helping Caregivers of Clients With Dementia

Caring for individuals with dementia can have negative psychosocial and physical effects. For example, such caregiving can negatively affect sleep, blood pressure, mood, and social functioning.[1122]

A caregiver may use alcohol or benzodiazepines to try to control an older adult's behavior. For instance, a caregiver may give alcohol to help the older adult sleep or to calm down the older adult when he or she is upset and angry. This is not recommended, is unsafe, and can worsen these behaviors. Tell caregivers not to use alcohol or benzodiazepines in this way.

Supports for people caring for older adults with dementia can include:[1123,1124,1125]

- Education-based programs to help caregivers:
  - Learn about the disease.
  - See the importance of taking care of themselves and reducing their own stress.
  - Better handle the older adults' negative behaviors (e.g., acting "out of control").
- Psychosocial services that provide:
  - Stress management techniques.
  - Relaxation skills.
  - Positive thinking strategies.
  - Tips on proper self-care (e.g., healthy eating, sound sleeping).
  - Chances for caregivers to share frustration, fear, sadness, and other negative feelings.
  - Problem-solving and other coping techniques.
- Participation in caregiver support groups—especially ones that focus on caregiving for someone with dementia. These groups let caregivers share common experiences and learn from one another; for instance, the Alzheimer's Association offers caregiver support groups (www.alz.org/events/event_search?etid=2&cid=0).

Helping Caregivers of Clients With Both Substance Misuse and Dementia

Anecdotal reports give some indication of the needs and problems faced by people caring for older adults with both substance misuse and dementia. **These caregivers likely face significant stressors. Greater levels of caregiver burden are present in caregivers of older adults with alcohol misuse who also have certain behavioral symptoms common in dementia**—disinhibition (or "out of control" behavior) and irritability—compared with caregivers of older adults with those same behavioral symptoms but no alcohol misuse.[1126]

Research about the burden of caring for people with multiple, complex, chronic conditions is also telling. For instance, having more than one chronic illness is linked to:[1127]

- Being highly dependent on a caregiver.
- A higher risk of death.
- More time spent in the hospital.
- Poor quality of life.
- Greater healthcare costs.

A caregiver of an older adult with co-occurring substance use and mental disorders may have unique challenges and special needs beyond those of caregivers of people with mental disorders only, including:[1128]

- Feeling unable to leave the older adult alone.
- Being more likely to fear the older adult will hurt himself or herself or others.
- Feeling less close to the older adult.
- Having more problems getting the older adult to take medications.
- Having more problems finding treatment.
- Feeling a higher level of emotional stress related to caregiving.
- Feeling that caregiving threatens his or her health.
- Feeling lonely as a caregiver.
- Having trouble talking with others about the older adult's mental health needs.
- Wanting help from a care coordinator or care manager.
- Wanting legal assistance.

Because of these concerns, caregivers for clients such as these may be especially in need of your help and resources. Be sure to reach out to them!

Summary

Substance misuse in older adults can increase the chances of having cognitive problems. It also can increase the chances of having co-occurring mental disorders with symptoms similar to cognitive disorders or mental disorders that cause changes in cognition and could be mistaken for a cognitive disorder. These co-occurring mental disorders include depression, anxiety, and PTSD. Behavioral health service and healthcare providers need to be aware of these other conditions and use screening instruments wisely to ensure that all older adult clients receive the right diagnosis and timely treatment. Treatments can address clients' and caregivers' mood, cognition, and functioning. Positive changes through treatment are possible for older adults who are dealing with substance misuse, mental disorders, and cognitive decline.

Chapter 6 Resources

Behavioral Health Service Provider Resources

Alcohol Misuse

SAMHSA—*A Guide to Preventing Older Adult Alcohol and Psychoactive Medication Misuse/Abuse: Screening and Brief Interventions* (www.ncoa.org/wp-content/uploads/SBIRT-Older-Adult-Manual-Final.pdf): This manual is designed to help providers implement an early prevention intervention program for older adults who are at risk for misusing alcohol or psychoactive medication.

SAMHSA—*Get Connected: Linking Older Adults With Resources on Medication, Alcohol, and Mental Health* (https://store.samhsa.gov/product/Get-Connected-Linking-Older-Adults-with-Resources-on-Medication-Alcohol-and-Mental-Health-2019-Edition/SMA03-3824): This toolkit will help providers learn—and educate clients—about alcohol and prescription medication misuse and mental health issues among older adults.

Dementia

Alzheimer's Association—Dementia Care Practice Recommendations (www.alz.org/professionals/professional-providers/dementia_care_practice_recommendations): These recommendations provide guidance to healthcare and social service providers who work with individuals living with dementia in residential and community-based care settings.

Association for Frontotemporal Degeneration—For Health Professionals (www.theaftd.org/for-health-professionals/): This webpage provides resources on diagnosing and treating frontotemporal degeneration, as well as links to webinars and clinical presentations.

National Alzheimer's and Dementia Resource Center (https://nadrc.acl.gov): Visitors to this website can access reports, toolkits, assessment tools, and webinars and other training materials.

National Institute on Aging (NIA)—Alzheimer's and Dementia Resources for Professionals (www.nia.nih.gov/health/alzheimers-dementia-resources-for-professionals): This webpage offers clinical practice tools, training materials, and other resources for healthcare and behavioral health service providers.

Registered Nurses' Association of Ontario—*Delirium, Dementia, and Depression in Older Adults: Assessment and Care* (https://rnao.ca/sites/rnao-ca/files/Delirium_dementia_and_depression_in_older_adults_LTC_case_study_and_discussion_guide.pdf): This publication contains a case study and a discussion guide to help providers learn the differences between depression, delirium, and dementia in older adults.

Client and Caregiver Resources

General Resources

Administration on Aging—Eldercare Locator (https://eldercare.acl.gov/Public/Index.aspx): This locator connects users to local services for older adults and their families.

ElderLawAnswers (www.elderlawanswers.com): This website maintains resources on financial and legal services related to caring for an older adult with healthcare and other needs.

Family Caregiver Alliance (www.caregiver.org): This organization offers an information line for caregivers of adults with chronic medical illnesses living at home, online caregiver support groups, and an online Family Care Navigator that provides a state-by-state list of services and assistance for caregivers.

mmLearn.org—Caregiver Training Videos (https://training.mmlearn.org/caregiver-training-videos): mmLearn has a library of free videos for healthcare, pastoral, and family member caregivers of older adults. Videos are available on specific topics, including caring for adults with dementia (https://training.mmlearn.org/caregiver-training-videos/topic/dementia).

National Alliance for Caregiving (www.caregiving.org): This organization conducts research and policy analysis, develops national best-practice programs, coordinates state and local caregiving coalitions, and provides a website offering educational resources for family caregivers.

Alcohol Misuse

Adult Children of Alcoholics (https://adultchildren.org): Adult children of people with AUD can use this website to find a listing of in-person and electronic meetings.

Al-Anon (https://al-anon.org): Al-Anon is a national mutual-help organization for people concerned about or affected by someone with alcohol misuse. The website offers information about the organization and how to find a local or electronic meeting.

NIA—Facts About Aging and Alcohol (www.nia.nih.gov/health/facts-about-aging-and-alcohol): NIA offers information about how alcohol can affect older adults' health and safety.

NIA—*Older Adults and Alcohol* (https://order.nia.nih.gov/sites/default/files/2018-01/older-adults-and-alcohol.pdf): Older adults can use this guide to learn about alcohol's harmful effects and ways to get help for alcohol misuse.

NIAAA—*Harmful Interactions* (www.niaaa.nih.gov/publications/brochures-and-fact-sheets/harmful-interactions-mixing-alcohol-with-medicines): Older adults and their caregivers can use this consumer guide to learn about harmful medication–medication and medication–alcohol interactions.

Seniors in Sobriety (www.seniorsinsobriety.com): This mutual-help organization for older adults with alcohol misuse has information about local meetings on its website.

Tobacco Use

CDC—Tips From Former Smokers (www.cdc.gov/tobacco/campaign/tips/index.html): Through this campaign, CDC offers videos of tips and stories from former smokers, plus other resources to help with tobacco cessation.

National Cancer Institute—*Clear Horizons: A Quit-Smoking Guide for People 50 and Older* (https://smokefree.gov/sites/default/files/pdf/clear-horizons-accessible.pdf): People ages 50 and older interested in tobacco cessation will find helpful information and strategies in this guide.

NIA—Quitting Smoking for Older Adults (www.nia.nih.gov/health/quitting-smoking-older-adults): This webpage provides information about nicotine and nicotine delivery devices (e.g., e-cigarettes, hookahs) and about strategies for stopping tobacco use.

Dementia

Alzheimer's Association—Resources (www.alz.org/help-support/resources): This webpage has links to a collection of consumer resources on Alzheimer's disease and dementia, including online tools, locators for community services and Alzheimer's Association chapters, and a virtual library.

Alzheimer's Association—Support Groups (www.alz.org/care/alzheimers-dementia-support-groups.asp): Local and online support groups offered by the Alzheimer's Association for caregivers and individuals with Alzheimer's can be found through this webpage.

NIA—Alzheimer's Disease & Related Dementias (www.nia.nih.gov/health/alzheimers): This webpage provides information about Alzheimer's causes, symptoms, and treatments, and about living with the illness or providing caregiving to someone who does.

NIA—Vascular Dementia and Vascular Cognitive Impairment: A Resource List (www.nia.nih.gov/health/vascular-dementia-and-vascular-cognitive-impairment-resource-list): This webpage links to free resources about vascular dementia, CADASIL (a rare form of vascular dementia), and Binswanger's Disease.

Chapter 6 Appendix

Geriatric Depression Scale (GDS)–Short Form

Client Version

Client's Name: Date:

Instructions: Circle the best answer for how you felt over the past week.

1.	Are you basically satisfied with your life?	Yes	No
2.	Have you dropped many of your activities and interests?	Yes	No
3.	Do you feel that your life is empty?	Yes	No
4.	Do you often get bored?	Yes	No
5.	Are you in good spirits most of the time?	Yes	No
6.	Are you afraid that something bad is going to happen to you?	Yes	No
7.	Do you feel happy most of the time?	Yes	No
8.	Do you often feel helpless?	Yes	No
9.	Do you prefer staying at home, rather than to going out and doing new things?	Yes	No
10.	Do you feel you have more problems with memory than most people?	Yes	No
11.	Do you think it is wonderful to be alive now?	Yes	No
12.	Do you feel pretty worthless the way you are now?	Yes	No
13.	Do you feel full of energy?	Yes	No
14.	Do you feel that your situation is hopeless?	Yes	No
15.	Do you think that most people are better off than you are?	Yes	No

Scoring Version

Client's Name: Date:

Scoring: Count boldface responses for a total score. A score of 0–5 is normal. A score of 6 or above suggests depression.

Instructions: Circle the best answer for how you felt over the past week.

1.	Are you basically satisfied with your life?	Yes	**No**
2.	Have you dropped many of your activities and interests?	**Yes**	No
3.	Do you feel that your life is empty?	**Yes**	No
4.	Do you often get bored?	**Yes**	No
5.	Are you in good spirits most of the time?	Yes	**No**
6.	Are you afraid that something bad is going to happen to you?	**Yes**	No
7.	Do you feel happy most of the time?	Yes	**No**
8.	Do you often feel helpless?	**Yes**	No

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9. Do you prefer staying at home, rather than going out and doing new things?	**Yes**	No
10. Do you feel you have more problems with memory than most people?	**Yes**	No
11. Do you think it is wonderful to be alive now?	Yes	**No**
12. Do you feel pretty worthless the way you are now?	**Yes**	No
13. Do you feel full of energy?	Yes	**No**
14. Do you feel that your situation is hopeless?	**Yes**	No
15. Do you think that most people are better off than you are?	**Yes**	No

The Client Version and Scoring Version of the GDS–Short Form were both adapted from material in the public domain.[1129]

Clients with a GDS score of 6 or higher need further assessment and may need treatment for MDD.[1130] Clients with a GDS score below 6 should be screened again in 1 month if symptoms of depression are still present.[1131] If a client's depressive symptoms are no longer present in 1 month, give the depression screener again in 6 months.[1132]

PTSD Checklist for DSM-5 (PCL-5)

Instructions: Below is a list of problems that people sometimes have in response to a very stressful experience. Please read each problem carefully and then circle one of the numbers to the right to indicate how much you have been bothered by that problem **in the past month**.

In the past month, how much were you bothered by:	Not at all	A little bit	Moderately	Quite a bit	Extremely
1. Repeated, disturbing, and unwanted memories of the stressful experience?	0	1	2	3	4
2. Repeated, disturbing dreams of the stressful experience?	0	1	2	3	4
3. Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)?	0	1	2	3	4
4. Feeling very upset when something reminded you of the stressful experience?	0	1	2	3	4
5. Having strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating)?	0	1	2	3	4
6. Avoiding memories, thoughts, or feelings related to the stressful experience?	0	1	2	3	4
7. Avoiding external reminders of the stressful experience (for example, people, places, conversations, activities, objects, or situations)?	0	1	2	3	4
8. Trouble remembering important parts of the stressful experience?	0	1	2	3	4
9. Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as: I am bad, there is something seriously wrong with me, no one can be trusted, the world is completely dangerous)?	0	1	2	3	4
10. Blaming yourself or someone else for the stressful experience or what happened after it?	0	1	2	3	4
11. Having strong negative feelings such as fear, horror, anger, guilt, or shame?	0	1	2	3	4
12. Loss of interest in activities that you used to enjoy?	0	1	2	3	4
13. Feeling distant or cut off from other people?	0	1	2	3	4

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In the past month, how much were you bothered by:	Not at all	A little bit	Moderately	Quite a bit	Extremely
14. Trouble experiencing positive feelings (for example, being unable to feel happiness or have loving feelings for people close to you)?	0	1	2	3	4
15. Irritable behavior, angry outbursts, or acting aggressively?	0	1	2	3	4
16. Taking too many risks or doing things that could cause you harm?	0	1	2	3	4
17. Being "superalert" or watchful or on guard?	0	1	2	3	4
18. Feeling jumpy or easily startled?	0	1	2	3	4
19. Having difficulty concentrating?	0	1	2	3	4
20. Trouble falling or staying asleep?	0	1	2	3	4

Reprinted from material in the public domain.[1133] *A digital, fillable form is available online (www.ptsd.va.gov/professional/assessment/documents/PCL5_Standard_form.PDF).*

Chapter 7—Social Support and Other Wellness Strategies for Older Adults

KEY MESSAGES

- Strong social networks support older adults in achieving and maintaining recovery from substance misuse. Providers can help older adults develop and maintain a social network that promotes recovery and wellness.
- Older adults have to increase their health literacy to maintain recovery and prevent relapse.
- Providers need to engage older adults in illness management and relapse prevention activities specific to substance misuse with a focus on health and wellness.
- Providers can help older adults feel more empowered by understanding the normal developmental challenges of aging and age-specific strategies for promoting resilience and setting goals.

Chapter 7 of this Treatment Improvement Protocol (TIP) will most benefit healthcare, behavioral health service, and social service providers who work with older adults (physicians, nurse practitioners, physician assistants, nurses, social workers, psychologists, psychiatrists, mental health counselors, alcohol and drug counselors, and peer recovery support specialists). It explains how older adults who misuse substances can benefit from wellness strategies that support relapse prevention, ongoing recovery, and better overall health. The keys to wellness for this group are having strong social networks and participating in health and wellness activities that support recovery.

The high prevalence of isolation in older adults who misuse substances can negatively affect cognitive functioning and reduce well-being. Older adults who lack family ties or social networks may find maintaining recovery from substance misuse difficult. Healthcare, behavioral health service, and social service providers can help older adults who misuse substances reduce isolation and improve recovery outcomes by promoting broader social networks.

Maintaining recovery from substance use can be harder for older adults who have trouble understanding and using health information. It may also be more difficult for those with limited self-management skills (e.g., difficulty engaging in regular exercise, healthy eating, or medication adherence). Medical conditions common in later life can also reduce functioning. Providers can engage older clients in skill-building and wellness activities that will support resilience and overall health while also reducing the likelihood of a return to substance misuse.

Organization of Chapter 7 of This TIP

Chapter 7 addresses promoting social support and other health and wellness strategies relevant to older adults in recovery from substance misuse.

The first section of Chapter 7 describes the importance of social support in promoting and maintaining health, wellness, and recovery among older adults who misuse substances. Types of positive social support, the impact of social isolation on health and wellness, and strategies for promoting and maintaining social support are examined.

The second section addresses how to promote other wellness strategies for older adults. This section specifically focuses on assessing and promoting health and wellness for older adults in recovery. It addresses health and wellness activities relevant to older adults, strategies for promoting health and wellness, illness self-management and relapse prevention approaches, and strategies for promoting resilience and empowerment among older adults, including goal setting.

The final section identifies targeted resources to support your practice, some of which appear in full in the Chapter 7 Appendix; additional resources appear in Chapter 9 of this TIP. Exhibit 7.1 provides definitions for key terms that appear in Chapter 7.

EXHIBIT 7.1. Key Terms

- **Addiction*:** The most severe form of substance use disorder (SUD), associated with compulsive or uncontrolled use of one or more substances. Addiction is a chronic brain disease that has the potential for both recurrence (relapse) and recovery.
- **Age-specific:** Treatment approaches and practices specifically developed for older adults (e.g., an older adult specialty group in a mixed-age SUD treatment program).
- **Alcohol misuse:** The use of alcohol in any harmful way, including heavy drinking, binge drinking, and alcohol use disorder (AUD).
- **Caregivers:** Informal caregivers provide unpaid care. They assist others with activities of daily living (ADLs), including health and medical tasks. Informal caregivers may be spouses, partners, family members, friends, neighbors, or others who have a significant personal relationship with the person who needs care. Formal caregivers are paid providers who offer care in one's home or in a facility.[1134] Most older adults do not need caregivers and are as able to address their own needs as younger adults, whether or not substance misuse is a factor in their lives.
- **Health literacy:** The ability to understand and use health information to make informed choices about health, wellness, and recovery.
- **Illicit substances:** Illicit substances include cocaine, heroin, hallucinogens, inhalants, methamphetamine, and prescription medications that are taken other than as prescribed (e.g., pain relievers, tranquilizers, stimulants, sedatives).
- **Mutual-help groups:** Groups of people who work together on obtaining and maintaining recovery. Unlike peer support (e.g., the use of recovery coaches or peer recovery support specialists), mutual-help groups consist entirely of people who volunteer their time and typically have no official connection to treatment programs. Most are self-supporting. Although 12-Step groups such as Alcoholics Anonymous (AA) and Narcotics Anonymous (NA) are the most widespread and well researched type of mutual-help groups, other groups may be available in some areas. They range from groups affiliated with a religion or church (e.g., Celebrate Recovery, Millati Islami) to purely secular groups (e.g., SMART [Self-Management and Recovery Training] Recovery, Women for Sobriety).
- **Peer recovery support specialist:** Someone in recovery who has lived experience in addiction plus skills learned in formal training. Peer recovery support specialists may be paid professionals or volunteers. They are distinguished from members of mutual-help groups because they maintain contact with treatment staff. They offer experiential knowledge that treatment staff often lack.
- **Peer support:** The use of peer recovery support specialists (e.g., someone in recovery who has lived experience in addiction plus skills learned in formal training) to provide nonclinical (i.e., not requiring training in diagnosis or treatment) recovery support services to individuals in recovery from addiction and to their families.

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- **Recovery*:** A process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential. Even individuals with severe and chronic SUDs can, with help, overcome them and regain health and social function. This is called remission. When those positive changes and values become part of a voluntarily adopted lifestyle, that is called being in recovery. Although abstinence from all substance misuse is a cardinal feature of a recovery lifestyle, it is not the only healthy, prosocial feature.
- **Relapse*:** A return to substance use after a significant period of abstinence.
- **Remission:** A medical term meaning a disappearance of signs and symptoms of the disease or disorder. The fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) defines remission as present in people who previously met SUD criteria but no longer meet any SUD criteria (with the possible exception of craving).[1135] Remission is an essential element of recovery.
- **Resilience:** The ability to rebound from adversity, skillfully address age-specific developmental tasks, and respond creatively to stress and grow from those experiences.
- **Substance misuse*:** The use of any substance in a manner, situation, amount, or frequency that can cause harm to users or to those around them. For some substances or individuals, any use would constitute misuse (e.g., underage drinking, injection drug use).
- **Substance use disorder*:** A medical illness caused by repeated misuse of a substance or substances. According to DSM-5,[1136] SUDs are characterized by clinically significant impairments in health and social function and impaired control over substance use. They are diagnosed through assessing cognitive, behavioral, and psychological symptoms. SUDs range from mild to severe and from temporary to chronic. They typically develop gradually over time with repeated misuse, leading to changes in brain circuits governing incentive salience (the ability of substance-associated cues to trigger substance seeking), reward, stress, and executive functions like decision making and self-control. Multiple factors influence whether and how rapidly a person will develop an SUD. These factors include the substance itself; the genetic vulnerability of the user; and the amount, frequency, and duration of the misuse. Note: A severe SUD is commonly called an addiction. A mild SUD is generally equivalent to what previous editions of DSM called substance abuse; a moderate or severe SUD is generally equivalent to what was formerly called substance dependence.

* The definitions of all terms marked with an asterisk correspond closely to those given in *Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health*. This resource provides a great deal of useful information about substance misuse and its impact on U.S. public health. The report is available online (https://addiction.surgeongeneral.gov/sites/default/files/surgeon-generals-report.pdf).

Social Support: The Key to Health, Wellness, and Recovery

People with significant social support tend to have healthier lifestyles, engage in fewer behaviors that risk health (e.g., substance misuse), and be more active. Older adults in long-term recovery from substance misuse have better outcomes when their social supports promote abstinence.[1137,1138]

Three major components of positive support for older adults are:

- **Family and friends.** Family members often provide most of an older adult's basic social support. Strong friendships and neighborhood supports can also be important to older adults. Friends often provide emotional support, and neighbors can offer immediate help in an emergency.

- **Mutual-help groups.** Mutual-help groups such as AA and NA can support abstinence and foster new social connections, a sense of belonging, and healthy lifestyles.
- **Religious or spiritual supports.** Participation in religious or spiritual fellowships can decrease social isolation and is associated with health and wellness.[1139]

In the 2015 World Values Survey, more than 75 percent of adults in the United States over age 60 responded that they considered themselves to be religious and sometimes or often contemplated the meaning of life (an indicator of a spiritual focus).[1140]

Many religions discourage drug use and alcohol use or misuse.[1141,1142] Involvement in religious and spiritual organizations can give older adults a sense of meaning, optimism, and self-esteem, lessening the impact of stressful life events like the death of a significant other.[1143] A sense of meaning and optimism can help maintain recovery from substance misuse.

The quality and diversity of older adults' social networks matter more than size in promoting health, well-being, and recovery and in lowering risk of substance misuse.[1144,1145] For example, tense relationships with family members can increase stress, which can negatively affect older adults' health and avoidance of relapse. In addition, too much support from children, although well-meaning, may increase older adults' dependence and reduce their sense of self-efficacy and well-being. Conversely, work colleagues, social contacts at senior centers, and behavioral health service and healthcare providers can be additional sources of emotional support. Mutual-help groups such as AA and NA can provide older adults with a stable source of friendships and enhance the diversity of their social networks.

The consensus panel recommends that you assess the number of social connections older adults have and also gauge the quality and diversity of those connections and how they promote wellness and recovery. (See the Chapter 7 Appendix for the Social Network Map for assessing and discussing social networks with older adults.)

Social Isolation

Social isolation, linked to loneliness, is common in older adults. Their social networks narrow because of retirement, decreased physical functioning, and deaths of spouses, intimate partners, and friends.[1146] A spouse or intimate partner is essential for many older adults' well-being. The death of a spouse puts older adults at high risk for social isolation, and may decrease life expectancy for men.[1147] Loneliness is linked with substance misuse in some older women.[1148]

ADDRESSING GRIEF

Older adults may experience multiple losses in a short time. Grief is a highly individualized experience; coping strategies need to be flexible and adaptive as you help clients explore feelings of grief.

Grief has no set timeframe. People do not "get over" the death of a loved one. Daily life continues as people integrate the experience of loss into their lived experience. As integration happens, the disorientation and disruption initially experienced after a death subsides, and older adults can open up to new possibilities.[1149]

You can provide a safe and supportive environment for clients to explore their feelings, help them remember their loved one, offer information about the grief process, identify struggles with coping, encourage them to tap into their own strengths and wisdom, and help them integrate the loss.[1150] If clients experience prolonged or complicated grief that interferes substantially with daily functioning—or if they have persistent suicidal ideation—consider referral to psychiatric evaluation or to a trained grief counselor.

Other factors that can add to social isolation for older adults include family members living far away, lack of transportation, cognitive decline, living alone or in unsafe neighborhoods,[1151] poverty, physical disability,[1152] and disruption of existing social networks via relocation to long-term care facilities.

Social isolation in older adults has been linked to:

- Increased likelihood of engaging in risky behaviors such as alcohol misuse and smoking.[1153]
- Increased risk of depression.[1154]
- Cognitive decline and risk for developing dementia.[1155]
- Poor overall health, cardiovascular disease, high blood pressure, sleep disturbances, and sedentary lifestyles.[1156,1157]
- Impairment in executive functioning, which makes it hard to engage in health-promoting physical activities[1158] or follow a relapse prevention plan.
- Increased risk for falls, rehospitalization, and death from all causes, including suicide among men.[1159]

SOCIAL ISOLATION AMONG OLDER ADULTS IN METHADONE MAINTENANCE TREATMENT

Older adults with opioid use disorder (OUD) who are in methadone maintenance treatment (MMT) may experience even more social isolation than older adults with other types of SUDs. Older adults who have used opioids for many years may have severed ties with family and friends and lost friends who overdosed. People who are in MMT also tend to be secretive about their history of opioid use and their status in treatment because of negative attitudes of friends, family, and society. Recent evidence suggests that people with a history of OUD tend to self-isolate because of:[1160]

- Past experiences of being taken advantage of.
- Fear of future loss.
- Desire to avoid depression/grief at death of friends/family.
- Past experiences of domestic violence.

You may need to address these concerns before you can work collaboratively with clients to build a nonusing social network that supports MMT as a pathway of recovery for older adults.

The consensus panel recommends that you screen older adults for social isolation and help them learn about the link between social isolation and substance misuse as part of your efforts to educate clients on health literacy. (See the Chapter 7 Appendix for a discussion of the Lubben Social Network Scale, a social isolation screening tool for older adults.)

Promoting Social Support for Older Adults

A lifespan perspective suggests that social networks change over a person's lifetime. One of the unique aspects of older adults' social networks is that those networks naturally shrink as people age and their close family members and friends die. This shrinkage may also occur because older adults become increasingly aware of the limits of time left in life and choose to focus on the most rewarding relationships. Doing so may help them emphasize emotional support while deemphasizing less satisfying relationships.[1161] A high degree of emotional closeness is associated with high levels of quality of life and well-being for older adults.[1162]

Strategies for improving social support for older adults in recovery from substance misuse should focus on expanding network size, increasing network diversity, and deepening the emotional closeness of network connections. Interventions to decrease social isolation and improve well-being should be adaptable to older adults' needs and interests, include their input about what works for them, and actively versus passively engage them (e.g., playing cards with friends versus watching TV together).[1163]

The consensus panel recommends the following interventions to promote social support for older adults who misuse substances.

Engage family members and other caregivers in recovery support. Perhaps the most important social support for older adults is frequent contact with family members (or other caregivers) who support their recovery. Help foster positive social contact between family members and older adults who misuse substances by:

- Involving family members and other caregivers in older adults' treatment (with express consent from clients).
- Educating clients, caregivers, and families about the importance of emotional and instrumental support for older adults' recovery. (An example of instrumental support is providing rides to appointments.)
- Educating caregivers about skillful ways to provide support.
- Educating family members about the importance of visiting the older adult when he or she is not misusing substances, rather than visiting only during substance-related crises (e.g., binge episodes).
- Recommending that family members and other caregivers participate in family support groups for caregivers and mutual-help groups for family members such as Al-Anon.

When family members are not nearby geographically or older adults are homebound, explore the possibility of clients' connecting with family members regularly via phone or video calling services. Studies show that frequent contact between older adults and family members via online communication applications decreases loneliness and increases social contact for the older adults.[1164]

See Chapter 4 of this TIP for more information about family and caregiver involvement.

Enlist neighborhood supports. Social cohesion in neighborhoods is another factor that promotes the health and well-being of older adults. For example, when neighbors provide instrumental support for older men and emotional support for older women, the older adults attain better physical health and mental well-being.[1165] You can help older adults build up this support by:

- Asking which neighbors they are close to.
- Helping them identify which neighbors have provided which kinds of support to them in the past.
- Asking them which neighbors they think would be supportive of their recovery efforts.

Many communities have befriending programs that send "friendly visitors"—who are trained volunteers—to the homes of older adults who have no close ties to neighbors or nearby relatives, or who are homebound. Visitors spend an hour or two a week with older adults to provide companionship, friendship, and linkage to health and wellness resources. They can often identify signs of substance misuse in the older adults they visit and help link these older adults to treatment resources. Contact your local Area Agency on Aging (AAA; see Resource Alert) to find out whether it or another organization in your community has a friendly visitor program.

RESOURCE ALERT: AREA AGENCIES ON AGING

AAAs' mission is to help older adults age with independence and dignity at home and in the community through a coordinated system of services and supports (https://eldercare.acl.gov/Public/About/Aging_Network/AAA.aspx). Established by the Older Americans Act (OAA) in 1973, AAAs now number 622 nationwide. The OAA was amended in 1978 to include services to American Indians, Alaska Natives, and Native Hawaiians.

Each AAA provides core services that address nutrition, disease prevention, health promotion, caregiver services, and older adult rights. Many AAAs also provide Medicare counseling, transportation, fall prevention and gentle exercise classes, adult daycare programs, social/recreational classes and groups, and other services geared to local community needs. AAAs are also a great place for older adults to volunteer.

Many states have Aging and Disability Resource Centers, often associated with AAAs, which can also provide specific community resources for services and supports to older adults and individuals with disabilities.

Go to https://eldercare.acl.gov and put in your ZIP Code to find the AAA in your community.

In rare cases, friends and family members may commit elder abuse.[1166] If you think such mistreatment is occurring, screen your older client for elder abuse (see Chapter 3 of this TIP).

Link clients to social and behavioral health support groups. In addition to linking your older clients to mutual-help groups such as AA, NA, or SMART Recovery, which can provide social as well as recovery support, refer them to social and behavioral health support groups in the community. These can range from smoking cessation groups to walking clubs to depression support groups. Create a list of organizations that offer support groups for older adults and actively link your client to one or more groups that are appropriate, accessible, and acceptable to him or her. (See Chapter 4 of this TIP for more information on active linkage to community resources and referral management.)

Agencies and organizations with support groups that may be helpful to older adults include:

- Recovery support organizations.
- Senior centers.
- Adult day health services.
- Community and private hospitals.
- Healthcare, behavioral health service, and social service programs for older adults.
- Veterans programs.
- Coalitions and advocacy groups for older adults.
- Assisted living facilities.
- Faith-based organizations.
- Community centers.

Link clients to peer recovery support specialists. An important strategy for increasing social support for older adults in recovery is to link them to peer recovery support services.[1167,1168,1169] Peer recovery support specialists work in a variety of settings, including addiction treatment programs, faith-based institutions, and recovery community organizations (RCOs).[1170] (For information on RCOs, see www.recoveryanswers.org/resource/recovery-community-centers.)

Peer recovery support specialists offer four types of social support: emotional, instrumental, informational, and affiliational (i.e., facilitating contact with others to strengthen social networks).[1171]

Linking older adults to peer recovery support specialists can:

- Increase and diversify older adults' social networks.
- Introduce older adults to the culture of recovery.
- Facilitate engagement and active participation in community-based mutual-help groups.
- Prevent relapse by helping older adults stay connected to mutual-help groups.

Peer recovery support specialists who work with older adults should have age-specific training and a commitment to working with this age group. These specialists are often older adults who can share their own experiences with recovery at this stage of life.

See Chapter 2 of this TIP for more information on key strategies for providing support to older adults.

Educate clients about social media and online social networking support. Online technologies—including social media applications and social networking websites—may be an important way for older adults to expand their support networks. Videoconferencing and use of social networking, educational and informational websites, and online discussion forums can reduce social isolation and improve social support, self-efficacy, and empowerment among older adults.[1172] In addition, information exchange about specific issues—such as substance misuse, recovery resources, chronic illness management, and health and wellness resources—in online social networks and discussion forums can boost well-being for older adults.[1173] Many addiction-focused mutual-help groups offer online meetings through chat rooms, web-based forums, and telephone or videoconferencing applications.

Many baby boomers already use smartphones and online technologies. About 42 percent of adults ages 65 and older own smartphones, up from 18 percent in 2013; 67 percent use the Internet.[1174] However, **barriers to social media and mobile technology use** include:[1175,1176,1177]

- **The cost** of owning a computer, tablet, or cell phone and data or Internet access fees.
- Lack of broadband infrastructure in rural and tribal areas.
- **Concerns about privacy** and what happens to personal information once it is posted on the web.
- **Decline in cognitive and physical functioning,** which hinders use. For instance, older adults may have physical or cognitive barriers in reading webpages that do not have universal accessibility, or difficulties using features of the device, like buttons on a cell phone or touchscreens.

Help older clients who are curious about or interested in trying online technologies for social support:

- **Access basic information about using online technologies safely** (e.g., protecting personal information, avoiding scams; for more information, see the Substance Abuse and Mental Health Services Administration's [SAMHSA] TIP 60, *Using Technology-Based Therapeutic Tools in Behavioral Health Services*).
- **Problem-solve ways to overcome access barriers** (Chapter 4 offers problem-solving strategies).
- **Learn about local and online resources** that are appropriate and acceptable to them. For example, senior centers, libraries, community colleges, community centers, AARP, Senior.net learning centers, and adult learning programs are potential sources of free or low-cost educational programs to help older adults learn how to use a computer and social media websites and applications.
- **Ask for support from family members or tech-savvy friends** who can help set up a computer, tablet, or cell phone; teach them how to safely use social media and other apps; and provide ongoing support in their use of technologies.

Specific websites offering assistance with social media are listed in the folllowing Resource Alert.

RESOURCE ALERT: CONNECTING OLDER ADULTS WITH SOCIAL MEDIA SUPPORTS

The *Staying Connected: Technology Options for Older Adults* brochure from Eldercare Locator (https://eldercare.acl.gov/Public/Resources/Brochures/docs/N4A_Tech_Brochure_P06_high.pdf) introduces older adults to types of social media and their benefits. It includes basic information on how to set up a Facebook account and how to use free video calling services like Skype.

Lifeline Support (www.lifelinesupport.org) provides information about a Federal Communications Commission program that offers eligible individuals financial assistance for Internet or cell phone services.

Some older adults living in retirement communities or long-term care facilities have a built-in social network that facilitates drinking.[1178] Older adults in such settings may perceive drinking as a pleasurable or necessary aspect of socializing with their fellow residents. If you have older clients who misuse alcohol to fit in to their residential setting, help them learn to feel comfortable saying "no" to too much—or any—alcohol in social situations. If you have older clients who enjoy the social aspects of drinking in these settings but engage in alcohol misuse, educate them about the importance of reducing their alcohol intake.[1179]

Promoting Wellness Strategies for Older Adults

This section reviews the eight dimensions of wellness and how to explore wellness from a client-centered perspective. It then examines strategies for promoting wellness, illness self-management and relapse prevention approaches, and strategies for promoting resilience and empowerment relevant to older adults in recovery from substance misuse.

What Is Wellness for Older Adults in Recovery?

Wellness is not simply abstinence from alcohol or drugs or the absence of illness or stress; it is being in good physical, emotional, and mental health.[1180] To better promote wellness and recovery in older adults, effective strategies should include a focus on illness self-management and relapse prevention and an emphasis on health potential.[1181]

SAMHSA has identified eight dimensions of wellness[1182] (Exhibit 7.2) that further a person's health, well-being, and recovery from substance misuse and mental disorders:

- **Emotional**—Coping effectively with life and creating satisfying relationships
- **Environmental**—Occupying pleasant, stimulating environments that support well-being
- **Financial**—Being satisfied with current and future financial situations
- **Intellectual**—Recognizing creative abilities and finding ways to expand knowledge and skills
- **Occupational**—Personal satisfaction and enrichment from one's work
- **Physical**—Recognizing the need for physical activity, healthy foods, and sleep
- **Social**—Developing a sense of connection, belonging, and a well-developed support system
- **Spiritual**—Expanding a sense of purpose and meaning in life

The consensus panel recommends that you explore all of these dimensions of wellness as a way to help older adults sustain their recovery from substance misuse.

Talk with clients about their own wellness goals in each of the eight dimensions. (See "Collaborative Goal Setting" in this chapter for more information.) This will help you understand what wellness means to each client and open the conversation about ways to develop health and wellness in recovery. (See the Chapter 7 Appendix for the Health Enhancement Lifestyle tool to assess older adults' health and wellness.)

For older adults in retirement, occupational wellness may be more about satisfaction and enrichment from nonpaid work such as volunteering in the community or a satisfying hobby like gardening or painting.

EXHIBIT 7.2. SAMHSA Wellness Wheel

Reprinted from material in the public domain.[1183]

Promoting Health and Wellness in Recovery

You can promote health and wellness among older adults in recovery from substance misuse by exploring obstacles to recovery, understanding their perspectives on health and wellness, and supporting their interest in and readiness to engage in activities that maximize health and wellness. The consensus panel recommends the strategies discussed below, which apply to diverse clinical and service settings, for promoting wellness among older adults in recovery.

General Wellness Promotion Strategies

Reduce fear, shame, guilt, and defensiveness related to substance misuse. Older adults may feel shame and guilt about acknowledging that they misuse substances. The first step in helping them achieve better health and wellness is to address their misconceptions about substance misuse and any fears they may have about treatment and the recovery process. One helpful strategy is to discuss substance misuse in a nonjudgmental way as a health issue like any other chronic illness (e.g., diabetes). Also express understanding and compassion to help older adults manage their fears and uncertainties about recovery from substance misuse and ways to engage in wellness activities to improve their health and well-being.[1184]

Identify wellness activities. Use the table in Exhibit 7.3 with clients to identify wellness activities that they find accessible, acceptable, and appropriate. Introduce the table by describing the eight dimensions of wellness and give some examples of activities in each domain. Then brainstorm with clients to identify specific activities in each domain that fit their preferences and wellness goals. With express consent from clients, ask supportive family members for suggestions on activities.

EXHIBIT 7.3. Identifying Wellness Activities

DOMAINS	EXAMPLES	CLIENT IDEAS
Emotional	Join a recovery or other support group; engage in storytelling with family or friends; keep a life history journal.	
Environmental	Make home modifications to age in place; create a quiet space at home; plant a flower box; seek "senior-friendly" safe housing.	
Financial	Organize financial documents; seek financial planning assistance.	
Intellectual	Join a book club; take an adult education or senior college class; learn a new skill; mentor a youth; teach a course or workshop.	
Occupational	Volunteer (e.g., become an AA or NA sponsor); get involved in advocacy initiatives; participate actively in a new or old hobby.	
Physical	Exercise by walking, dancing, swimming, or doing yoga or tai chi; eat healthy foods; develop a healthy sleep routine.	
Social	Go on group outings, such as to museums or historical sites; join a bridge club; take a cooking class.	
Spiritual	Join a faith-based or spiritual fellowship; meditate or pray; read inspirational material.	

Strategies To Increase Motivation

Increase motivation to change health risk behaviors and participate in wellness activities through motivational interviewing (MI). MI is a nonconfrontational, respectful approach that can effectively help older adults resolve ambivalence about change and increase motivation to change a target behavior.[1185] MI strategies can help older adults reduce alcohol consumption and tobacco use, improve general health, increase physical activity and exercise, improve diet, reduce cardiovascular risk factors, lose weight, and prevent disease.[1186,1187]

MI strategies can help older adults change health risk behaviors like intentional or unintentional misuse of prescription medications, and resolve ambivalence about participating in wellness activities. Use the following MI strategies to help older clients identify and plan for achieving target behaviors that reduce health risk, improve wellness, and sustain recovery from substance misuse:

- **Identify a specific target behavior** that the client is willing to explore (e.g., attending an educational session about the health risks of medication misuse for older adults or calling the local senior center to find out about a tai chi class). The more specific the target behavior, the more likely you and the older adult will be able to work together toward achieving the client's change goal.
- **Apply MI communication skills** (e.g., OARS—open questions, affirmations, reflective listening, and summarization) to shape the conversation with clients to help them resolve ambivalence about change. (See the Chapter 7 Appendix for an example of using OARS.)
- **Emphasize change talk** through reflective listening.
- **Help the client create a change plan** for each target behavior by writing down the change goal and a timeframe for achieving that goal. (The "Collaborative Goal Setting" section has more information.)
- **Follow up with the client** to see whether the change plan is working or needs adjustment.

For more on MI, see SAMHSA's update of TIP 35, *Enhancing Motivation for Change in Substance Use Disorder Treatment* (https://store.samhsa.gov/product/TIP-35-Enhancing-Motivation-for-Change-in-Substance-Use-Disorder-Treatment/PEP19-02-01-003).

Educational Strategies To Address Nutrition, Exercise, and Fall Prevention

Provide education on nutrition, exercise, and fall prevention. Access to health information, a key component of health literacy, enables people to better manage their health and sustain recovery. Three key elements of preventive care for older adults in recovery from substance misuse are nutrition, exercise, and fall prevention. You don't need to be an expert in nutrition or fitness to provide older adults with accurate information about health. Just knowing a few things about these elements of wellness for older adults can help you get the conversation started.

> Advise older clients to check with their healthcare provider before starting or dramatically changing their exercise routine or diet.

Begin by educating yourself. Explore the resources listed in the Resource Alert below for information on nutrition, exercise, and fall prevention for older adults. Then take a client-centered approach to client education and information exchange using these strategies:

- **Ask older clients what they know** about nutrition, exercise, and fall prevention for people their age.
- **Provide small chunks of information** that are personally relevant to older clients; use visual aids.
- **Ask clients what they think of this information** and how it affects their level of interest in or readiness to engage in health promotion activities.

- **Develop an individualized change plan.** If the information has an impact and clients are ready to act, brainstorm activities that they think are fun, easy, accessible, and personally relevant.
- **Follow up at the next visit.** Ask clients what worked and did not work, and help them adjust the change plan while making progress toward change goals.

Client education is a process of information exchange over time, not a single event. Information exchange can help you build a closer relationship with clients through a deeper understanding of their own experiences with making health behavior changes.

RESOURCE ALERT: OLDER ADULT NUTRITION, EXERCISE, AND FALL PREVENTION

The National Institute on Aging's (NIA) Health Topics A-Z webpage (www.nia.nih.gov/health/topics) offers easy-to-read information specific to older adults on a range of health topics, including healthy eating, exercise, and fall prevention.

Engaging American Indian/Alaska Native Elders in Fall Prevention Programs (www.ncoa.org/resources/engaging-american-indianalaska-native-elders-falls-prevention-programs), a National Council on Aging tip sheet, offers culturally responsive, practical strategies for American Indian and Alaska Native elders on fall prevention.

Strategies for Complementary Therapies, Spirituality, and Ancillary Services

Encourage the informed use of complementary therapies and activities. Complementary and integrative medicine techniques can be categorized into three groups—natural products (e.g., vitamins, herbal products), mind–body practices (e.g., meditation, yoga), and other health approaches (e.g., homeopathy, naturopathy). (See "Resource Alert: Complementary and Integrative Health for Older Adults.") Many complementary therapies and activities are appropriate for helping older adults maintain good health and well-being in ongoing recovery. For example, owning or interacting with a pet (e.g., in animal-assisted therapy) can increase physical activity, improve cardiovascular functioning, enhance socialization, lower blood pressure, and decrease loneliness in some older adults.[1188] Tai chi, a low-impact exercise and meditative movement, may prevent falls by improving balance, strength, mobility, and flexibility.[1189,1190] It may also help older adults sleep better.[1191]

Practicing mindfulness has many mental, emotional, spiritual, and health benefits that can enhance older adults' sense of well-being. Mindfulness has been widely adapted and studied in the United States as a strategy for stress reduction and healthy coping. Mindfulness helps people develop open, nonjudgmental attention to present-moment experience. Older adults can use mindfulness skills to cope with stresses like physical pain and financial worries. Mindfulness may also increase older adults' social support, well-being, and ability to regulate emotional states like depression, anger, and anxiety.[1192]

You can incorporate mindfulness practices in work with older adults or refer your clients to local programs that teach mindfulness. For more on mindfulness and mindfulness-based programs, see the website of the Center for Mindfulness in Medicine, Health Care, and Society at www.umassmed.edu/cfm.

Other complementary therapies and wellness activities appropriate for older adults in recovery include:

- Gentle or senior-friendly yoga.
- Dance and movement therapy.
- Low-impact fitness programs.
- Swimming and water therapy.
- Meditation.

The consensus panel recommends that you explore the benefits and potential downsides of complementary therapies with your older clients and work collaboratively with them to find the right fit based on cost, level of physical and cognitive functioning needed to participate successfully, age-specific adaptations, and ease of access.

Explore the spiritual dimension of wellness and recovery. As mentioned previously, participation in religious or spiritual fellowship can expand the social dimension of wellness for older adults. For example, one recent study found that more frequent attendance at church among adults ages 50 and older is associated with a sense of belonging and greater spiritual support, which are in turn associated with a greater likelihood of positive self-report of health.[1193] Engagement in religious activities (e.g., praying, attending religious services) and spiritual practices (e.g., mindfulness, meditation), including the spiritual aspects of AA, are linked with better alcohol use outcomes, improved recovery from AUD, increased coping skills and ability to manage stress, decreased anxiety and depression, and improved cognition.[1194,1195]

To **explore the spiritual dimensions of wellness and recovery with older clients,** you can:

- Acknowledge that spirituality or religious engagement may be important to your clients' well-being.
- Be open to exploring clients' spiritual or religious beliefs and practices and their potential impact on clients' health, wellness, and recovery. Do not insert your own beliefs into the conversation.
- Explore how your clients' understanding of spirituality relates to their overall well-being, experience of recovery, sense of meaning and purpose, health, and coping with loss, stress, or adversity.
- Encourage active participation in personally relevant religious or spiritual activities such as attending religious services, attending AA or NA 12-Step meetings, praying, engaging in mindfulness or meditation, or "giving back" by becoming an AA or NA sponsor or volunteering in the community.

Actively link or refer older adults to ancillary services, such as:

- Health care provided by physicians with experience and training in geriatric medicine.
- Specialized pharmacy services.
- Health education programs.
- Disease prevention or wellness counseling services.
- Complementary therapies.
- Fitness programs for older adults.

Active linkage includes contacting the service or program you are referring your client to, getting a release from your client, giving written instructions to your client about how to access the service (e.g., name of provider, appointment time), and following up with the ancillary service provider via phone, letter, or email. (Chapter 4 of this TIP has more information about active linkage and referral management.)

RESOURCE ALERT: COMPLEMENTARY AND INTEGRATIVE HEALTH FOR OLDER ADULTS

These resources offer providers and consumers research-based information on some complementary and integrative medicine treatments for older adults:

- The American Society on Aging's blog post about mindfulness and older adults is easy to read and could serve as a useful one-page handout to clients (www.asaging.org/blog/be-here-now-and-age-mindfully).
- The American Geriatrics Society website GeriatricsCareOnline.org offers a useful summary of complementary and integrative medicine approaches. The site also includes a table of natural products and their interactions with prescribed medications as well as a summary of the evidence base for complementary and integrative medicine approaches as they relate to different health conditions common in aging (https://geriatricscareonline.org/FullText/B030/B030_VOL001_PART001_SEC002_CH012).

Recognize and explore strengths. Older adults have a great deal of knowledge from their own experience, practical wisdom, and a wide range of skills and abilities. A strengths-based approach assumes that people do not simply survive difficult life circumstances, including substance misuse and the aging process itself, but can thrive in recovery and achieve enhanced health and wellness. Exploring older adults' strengths

involves validating their interests, acknowledging and appreciating their successes, and inviting them to reflect on future possibilities.[1196]

Clinical Scenario: A Strengths-Based Intervention

Older adults in recovery from substance misuse who are widows or widowers may feel guilty about surviving and lose interest in life. The following scenario focuses on exploring an older adult's strengths to rekindle a sense of possibility about the future.

- **AUD Recovery and Loss:** An older adult in recovery from AUD drops out of AA after becoming a widower.
- **Treatment Setting:** Outpatient addiction treatment program
- **Provider:** Licensed alcohol and drug counselor
- **Treatment Strategy:** Strengths-based approach

Harry is 79 years old. He has been in recovery from AUD for 3 years. He initially attended AA meetings, became actively involved in the program, and attended recovery-oriented social gatherings with his wife, Ginny. When Ginny died suddenly, Harry stopped going to AA and isolated himself from family and friends. His daughter became worried about him and convinced him to go see a counselor.

At the initial interview, the provider acknowledges Harry for maintaining his abstinence through a very difficult time. This acknowledgement helps Harry feel more comfortable talking about how he has lost interest in going to meetings or spending time with family and friends. He says, "I just can't let myself have fun or feel joy anymore. It's like I would be betraying Ginny. I'm the alcoholic and she is the one who died too young. It should have been me."

The provider offers Harry an affirmation and an open question that directs the conversation toward exploring Harry's strengths and an alternative story about his pulling back from life, "I appreciate your efforts to honor Ginny's memory. It seems like you really respect and appreciate how other people have touched you and contributed so much to your life. Not everyone has that quality. How did you come by that ability?"

Harry begins to tell a story about how he learned about respecting others early in his life and how important being respectful is to him. This opens the door for the counselor to explore Harry's other strengths and abilities. "What other abilities or talents would you say have contributed to your life?"

As the provider helps Harry identify his strengths, Harry starts to believe in himself again and gives himself permission to feel good. His story about honoring Ginny changes. He sees another way he can honor his wife: by getting back to living his own life. He decides to call his former AA sponsor about returning to his home group.

Promoting Self-Management and Relapse Prevention

Perhaps the most critical tasks for older adults who misuse substances are to achieve stability and maintain ongoing recovery. Sustaining recovery is challenging without a sense of health and well-being, especially for older adults with co-occurring mental disorders or multiple chronic illnesses. Relapse prevention planning is the key to helping older adults identify potential relapse triggers and build coping skills. Engaging older adults in chronic illness self-management programs, relapse prevention planning, continuing care, and ongoing recovery support can help them maintain long-term recovery.

Chronic Illness Self-Management

Chronic illnesses can increase isolation and interfere with substance misuse recovery efforts. Mental disorders like depression and anxiety are common in older adults. So are chronic health conditions: 80 percent of older adults have at least one chronic health condition, such as diabetes, arthritis, hypertension, cardiovascular disease, pulmonary disease, and chronic pain.[1197] **Illness self-management programs are an important part of integrated and client-centered care. They improve health outcomes, help people maintain higher levels of health functioning, and enrich quality of life** by helping people develop skills to manage their symptoms and change attitudes and behaviors.[1198]

One such program, the Stanford Chronic Disease Self-Management Program (CDSMP),[1199] is an evidence-based approach that has demonstrated effectiveness with older adults. **CDSMP has helped people improve wellness across several dimensions,** such as through improvements in exercise, cognitive symptom management, and self-reported general health; decreases in health distress, fatigue, and disability; and reduced hospitalizations.[1200] To help older clients develop and sustain chronic illness self-management plans, CDSMP:

- Explores with clients how having a chronic condition affects them and how, if not properly managed, the condition may interfere with recovery from substance misuse.
- Addresses depression and anxiety, often associated with substance misuse and chronic illnesses.
- Acknowledges the challenges and successes of daily self-management of symptoms.
- Addresses ways to build structure into daily routines to support clients' ability to manage symptoms while emphasizing recovery and wellness activities (e.g., take medication as scheduled, have lunch with a friend, attend AA meetings or other support groups).
- Provides information on and links clients to local or online CDSMP services.
- Supports clients in their efforts to sustain self-management of symptoms while actively participating in recovery and wellness activities.

To find organizations that offer a licensed CDSMP, go to www.eblcprograms.org/evidence-based/map-of-programs. Also check with the AAA or the Aging and Disability Resource Center (if available) for your community.

The Self-Management Resource Center (www.selfmanagementresource.com) offers a variety of illness self-management programs, including an online program, originally developed by and housed at the Stanford Patient Education Research Center. The Self-Management Resource Center also provides information about training and licensing for organizations that would like to offer a CDSMP.

Clinical Scenario: Promoting Chronic Illness Self-Management

Older adults in recovery from substance misuse who have chronic medical conditions may feel ashamed of having an illness that limits their functioning and ability to engage in recovery activities. The following scenario focuses on an older adult's negative self-judgments about having a chronic medical condition.

- **AUD Recovery and Chronic Medical Condition:** An older adult in long-term recovery from AUD has a chronic medical condition.
- **Treatment Setting:** Hospital-based outpatient behavioral health program
- **Provider:** Licensed psychologist
- **Treatment Strategies:** Foster self-acceptance and promote chronic illness self-management activities.

Ruth is 69 years old, is in long-term AUD recovery, and has attended AA for many years. She lives with her daughter and two grandchildren. Her daughter is divorced and works full time. Ruth watches her grandchildren after school. She became the General Service Representative of her home AA group and sponsored many members over the years. She smoked cigarettes for 20 years. Ruth frequently tells people that "smoking is a bad habit I picked up at meetings." She recently stopped after she was diagnosed with chronic obstructive pulmonary disease (COPD). Ruth's pulmonologist referred her to counseling at the hospital's outpatient program given her score of 12 on the Patient Health Questionnaire, indicating moderate depression. (Chapter 3 of this TIP offers screening and assessment tools.) She also was not following instructions for managing her COPD.

In counseling, Ruth discloses that she feels ashamed that she has COPD. She stopped going to AA meetings because she feels like a failure for having a chronic medical condition that she says she should have avoided. She also finds it more and more difficult to leave the house. Her energy is low, and she coughs all the time. She also states that she has recently felt like drinking after seeing alcohol commercials on TV.

The provider helps Ruth identify specific self-judgments about COPD. Ruth says, "I hate being sick all the time. I don't want another chronic illness. It's my fault for not taking care of myself. I really failed this time." The provider helps her reevaluate her perspective about what it means to have a chronic illness and how to manage it, using her experience in recovery as an analogy. The provider says, "You told me that when you first got into recovery, you felt a lot of shame. But you started to feel more accepting when other people talked about alcoholism as a disease that has no cure but can be managed a day at a time." Ruth tells the provider that she benefited from having a support group to help her learn about her disease, how to accept it, and ways to manage it.

The provider asks Ruth how she quit smoking after 20 years and avoided drinking. She says that she got a nicotine patch and went to a quit smoking group at the hospital. The provider says, "So it seems like you used some of the same tools you used to get sober to stop smoking and stay sober too." Ruth says, "I guess I'm not such a failure. If I can stay sober for this long and quit smoking after 20 years, I can learn to manage the COPD."

The provider then explores possible community COPD support resources, including a pulmonary rehabilitation program at the hospital that teaches people about COPD, how to manage their symptoms, and how to save their energy for other activities. Ruth agrees to sign up for the program. She says, "If I can get this thing under control and I have more energy, I'm sure I can get back to my home group. I really miss everyone."

Ruth and her provider agree to keep meeting while Ruth is in the pulmonary rehabilitation program to monitor her progress and explore any obstacles to returning to AA and staying focused on managing her COPD.

Continuing Care and Relapse Prevention

Continuing care in addiction treatment has traditionally consisted of short-term (e.g., 12-week) outpatient group counseling and passive referral to mutual-help groups. Current thinking about **continuing care emphasizes interventions that are long term and flexible enough to adjust to the needs of clients as they move through different stages of recovery.**

Staying longer in addiction treatment and having a social support system after treatment that reinforces abstinence from alcohol and illicit drugs are two of the most important factors associated with long-term recovery for older adults.[1201] Continuing care for older adults should emphasize:

- Retention in ongoing treatment and recovery support, including mutual-help group meetings.
- Relapse prevention planning.
- Use of in-home or telephone counseling as appropriate to strengthen retention and engagement.
- Active involvement (with the older adults' permission) of spouses and other family members, or other significant others who support the older adults' recovery.
- Active linkage to and follow-up with community-based resources, such as housing and employment services (when needed); senior centers; and fitness, health, and wellness services for older adults.

Also, some individuals find treatment facility alumni programs helpful in supporting their recovery from SUDs. Alumni programs typically offer graduates of the same treatment facility ongoing support through organized activities, continued contact with treatment staff, and further addiction education.

SOCIAL NETWORK COUNSELING

Network Support is a counseling intervention that consists of 12 counseling sessions (some including a spouse or significant other) that emphasize AA as a mutual-help group where people can make new friends and engage in nondrinking social and recreational activities. This approach can change the social network of the participants to include more nondrinking friends, which in turn can increase self-efficacy and coping, leading to improvements in long-term drinking outcomes.[1202] A key to ongoing recovery for older adults is a social network that supports recovery. When talking with older adults about the benefits of AA, emphasize the social aspects of mutual-help group attendance, an important factor in sustaining long-term recovery.

Relapse prevention planning is an important part of treatment and continuing care. You can facilitate this process by understanding older adult-specific relapse risk factors and strategies for reducing the risk of a return to substance misuse.

Some factors that increase the risk of relapse for older adults who misuse substances[1203] include:

- Loneliness and isolation.
- Boredom.
- Chronic pain.
- Untreated mental disorders or symptoms of anxiety and depression.
- Complicated grief.
- Sleep problems.
- Lack of social support for recovery.
- Chronic medical problems.
- Unsafe or unsuitable living environment.
- Prolonged stress.
- Difficulty managing instrumental ADLs including finances.
- Misunderstanding of relapse or lack of a relapse prevention plan.

Support your older clients in maintaining ongoing recovery and reducing the risk of relapse by:[1204,1205,1206]

- Helping them develop meaningful leisure, social, or vocational activities.
- Working with them and their physicians on alternative pain management strategies.
- Addressing grief issues throughout treatment and referring for additional supportive services when needed. (See the grief resource in the Chapter 4 Appendix of this TIP.)
- Providing information about good sleep habits (e.g., give up a daytime nap if it interferes with sleep at night) and low-risk nonpharmacological ways to cope with sleep problems.
- Ensuring that co-occurring mental and physical disorders get addressed and treated.
- Ensuring that they are keeping medical appointments, taking medications as prescribed, and communicating changes in health status to their healthcare providers.
- Teaching them stress management and coping skills throughout treatment.
- Helping them develop or broaden social networks that support recovery.
- Developing relapse prevention plans tailored to their individual needs.
- Exploring the potential for a return to substance use, normalizing relapse without implying that it is inevitable, and reframing relapse as a learning opportunity.
- Reviewing their past success in managing triggers; discussing themes and triggers for past relapses.
- Developing plans for reengaging in treatment if they return to substance use before it becomes a full relapse to previous levels of use.
- Working with them to evaluate coping strategies and, if needed, retrain on existing strategies or develop new ones.
- If appropriate to your role and setting, sustaining long-term supportive contact with them, with the emphasis on helping them maintain stability in recovery and better health and wellness.

Promoting Resilience and Empowerment in Recovery

Interventions that promote resilience can support relapse prevention efforts.[1207] **Thinking of older adults as inflexible or "set in their ways" is ageist and fails to acknowledge the skills, abilities, and wisdom they have acquired from years of experience.** Instead, promote resilience and empower your older clients in recovery from substance misuse by:

- Learning about their unique life-course events and challenges.
- Tapping into their wisdom.
- Supporting them in reflecting on successful resolutions to past challenges they have faced.
- Helping them build coping skills to meet the challenges of recovery from substance misuse.

Tasks and Challenges of Aging

Developmental theory suggests that a person has unique, age-specific tasks to master over the life course. The tasks of older adulthood can be challenging, yet rewarding, and include:

- Adjusting to decreasing physical health, strength, and cognitive functioning.
- Adjusting to retirement and reduced income.
- Trying new activities (e.g., creative hobbies limited earlier by career, job, or family responsibilities).
- Establishing safe housing and satisfactory living arrangements.
- Entering new social roles, including affiliating with one's age group, caring for relatives (particularly relevant for women), and grandparenting.
- Adjusting to and accepting the death of a spouse, other family members, or friends.
- Finding meaning in life while facing the prospect of death.[1208]

One way to think about the challenges of aging is to understand that with age comes a broad spectrum of losses and transitions that may be traumatic for the older adult. Work from a perspective of trauma-informed care, which assumes that older clients' presenting issues, behaviors, and emotional reactions may be adaptive responses to trauma or loss and not symptoms of pathology.

The consensus panel recommends that you approach every older adult in SUD treatment or recovery from a trauma-informed and person-centered perspective that recognizes that the experiences of trauma, loss, and grief are highly individualized.

See SAMHSA's TIP 57, *Trauma-Informed Care in Behavioral Health Services*, for an indepth examination of a trauma-informed approach to the treatment and prevention of addiction and mental illness (https://store.samhsa.gov/product/TIP-57-Trauma-Informed-Care-in-Behavioral-Health-Services/SMA14-4816). See also www.samhsa.gov/trauma-violence.

Despite age-related losses and limitations on physical and cognitive functioning, older adults can experience mental growth and maturation.[1209] Most older adults maintain a positive outlook, improve their emotional regulation over time, and express a high degree of life satisfaction. Many older adults rise to the challenge, rediscover themselves, and grow from traumatic or stressful experiences. You can support your older clients in recovery in addressing the tasks and challenges of aging by:

- Recognizing that loss and transition are a normal part of aging and helping your older clients identify the losses and transitions specific to them.
- Recognizing that your older clients who have experienced the death of a spouse or intimate partner are at higher risk for starting or returning to alcohol misuse or drug use.
- Connecting your older clients with recovery supports when the urge to drink or use drugs arises.
- Recognizing that multiple losses may trigger trauma reactions in older adults with a history of depression, anxiety, or other mental disorders, including posttraumatic stress disorder, and treating co-occurring mental disorders concurrently.
- Helping your older clients identify day-to-day coping strategies, including maintaining a regular schedule, which helps people structure activities and maintain participation in social activities.[1210]
- Helping your older clients accept supports and services needed to maximize functioning and independence.
- Aiding them in balancing distraction from negative emotions with acceptance and learning to tolerate intense emotions associated with trauma.
- Helping clients identify personally relevant strategies for coping with and making meaning of loss and managing normal feelings of grief.
- Exploring with them whether reconnecting to a faith community could provide meaning and purpose.

- Linking clients in institutional settings (e.g., hospitals, assisted living) to mutual-help groups that provide meetings in such settings, if available.
- Helping clients build bridges to new sources of meaning and purpose.[1211]
- Exploring with clients the role adjustments they may face related to retirement; death of a spouse, other family members, friends, or a sponsor; a move to another geographic area; or taking on a parenting role for grandchildren.
- Helping clients build and strengthen their support networks.
- Encouraging them to explore creative ways to make amends, bring closure to a chapter in their life, celebrate past accomplishments and new developments in their life, or remember a significant other (e.g., creating personally meaningful rituals and ceremonies, writing therapeutic letters, creating memory books).

Strategies for Strengthening Resilience

To help your older clients foster resilience, encourage them to recognize that they can develop cognitive, emotional, and behavioral coping skills that strengthen their ability to prevent relapse, manage stress, and rebound from adversity. Bolstering resilience in older adults helps promote healthy aging, improves responses to developmental tasks and challenges, and heightens quality of life.[1212] The ability to cope with stressful situations is a key factor in preventing relapse from SUDs (see Resource Alert).

RESOURCE ALERT: STRATEGIES FOR BUILDING RESILIENCE[1213]

An American Psychological Association webpage (www.apa.org/topics/resilience) describes strategies people can use in supporting recovery from SUDs.

Collaborative Goal Setting

Collaborative goal setting draws on clients' strengths and focuses on developing attainable goals. This can promote a positive attitude toward changing substance misuse behaviors[1214] and create a sense of self-efficacy and hope for older adults in ongoing recovery. Goals should be personally relevant to your older clients, challenging but realistic, achievable, and specific.[1215]

As a provider, you can facilitate goal setting with your older clients by:

- **Helping them identify emotionally meaningful goals** that support recovery and improve health and wellness (e.g., spending more time with family and friends, maintaining independence or recovery support, aging in place).
- **Targeting short-term, easily attainable goals that build toward larger goals.** For example, to stop alcohol use, help clients identify activities to do instead of drinking (like going out to dinner with a nondrinking friend rather than staying home at night drinking).
- **Collaborating with your clients to develop a SMART plan** (Exhibit 7.4) for achieving the identified substance misuse or wellness goal; the plan should specify a timeframe and any supports clients need to meet the goal.
- **Monitoring progress toward meeting goals** for reducing or stopping substance misuse or engaging in wellness activities.
- **Helping clients modify goals as needed.** Questions you can ask your older clients include:
  - Was your initial goal too easy or too hard?
  - Would accomplishing smaller tasks, like reducing your alcohol intake, make it easier to accomplish your ultimate goal of stopping completely?
  - What obstacles prevented you from achieving or maintaining abstinence?
  - What obstacles prevented you from starting the wellness activity (e.g., taking a walk every day)?
  - What are some of your strategies for overcoming these obstacles?
  - Is your goal still important to you, or is it time to move to a different goal?

EXHIBIT 7.4. Writing a SMART Goal

Specific: State the goal clearly. Ask the client to be specific. For example, if the goal is "I just want to be healthy," ask "How will you know when you are 'healthy'?" or "What things will you be able to do when you are healthy that you can't do now?"

Measurable: Identify and quantify the observable markers of progress, such as pain levels or the number of days and amount of time the client walked each week. Invite the client to keep a log of these markers so you can discuss the client's progress.

Attainable: Break the goal into smaller, actionable steps. Identify expected barriers and make a plan to address them. For example, if the goal is to get 8 hours of sleep each night, break the goal into smaller tasks, like turn all the lights in the bedroom off at 10 p.m. at least five nights a week. Then ask, "What might keep you from turning the lights off at 10 p.m.?"

Relevant: Make sure the goal reflects what's personally relevant to the individual. Use MI to set the agenda and determine goals on which to focus. Link goals, such as blood pressure control, to the goal of staying healthy.

Time-bound: Define when the goal is to be attained. Help the client be specific about the timeframe. Make it realistic and attainable, based on the client's subjective evaluation. Agree when to check progress.

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Help older clients learn which health and wellness activities will help them prevent return to substance misuse, broaden social networks, build resilience, and give meaning and purpose to ongoing recovery.

Chapter 7 Resources

Provider Resources

A Clinician's Guide to CBT With Older People (www.uea.ac.uk/documents/246046/11919343/CBT_BOOKLET_FINAL_FEB2016%287%29.pdf/280459ae-a1b8-4c31-a1b3-173c524330c9): This workbook explores age-sensitive strategies for adapting cognitive–behavioral therapy for older adults.

Centers for Disease Control and Prevention (CDC)—Alzheimer's Disease and Healthy Aging (www.cdc.gov/aging/index.html): CDC offers educational materials and resources to help healthcare providers engage in activities of its Healthy Aging Program.

Centers for Medicare and Medicaid Services—*Annual Wellness Visit* (www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/AWV_chart_ICN905706.pdf): Healthcare providers can use this booklet to learn about the elements of the Health Risk Assessment and the Annual Wellness Visit.

National Council on Aging—Center for Healthy Aging (www.ncoa.org/center-for-healthy-aging): The Center for Healthy Aging provides educational resources for providers on health and wellness, disease management, nutrition, exercise, and fall prevention for older adults.

NIA—Health Topics A-Z (www.nia.nih.gov/health/topics): NIA provides an alphabetical listing of educational resources and information that may be useful for providers when educating older adults on health and wellness topics.

Consumer Resources

Administration on Aging—Eldercare Locator (https://eldercare.acl.gov/Public/Index.aspx): The locator connects older adults and their families to local services.

Eldercare Locator—*Expand Your Circles: Prevent Isolation and Loneliness As You Age* (https://eldercare.acl.gov/Public/Resources/Brochures/docs/Expanding-Circles.pdf): This easy-to-read brochure offers tips to older adults about expanding their social networks.

National Council on Aging—Resources (www.ncoa.org/audience/older-adults-caregivers-resources/?post_type=ncoaresource): This webpage contains a searchable database of articles, webinars, and other resources.

NIA—Alcohol Use or Abuse (www.nia.nih.gov/health/topics/alcohol-use-or-abuse): This webpage has links to information for older adults and family members about alcohol misuse.

NIA—*Older Adults and Alcohol: You Can Get Help* (https://order.nia.nih.gov/sites/default/files/2018-01/older-adults-and-alcohol.pdf): This easy-to-read consumer brochure lays out the issues and answers common questions that older adults have about drinking.

Silver Sneakers—Health and Fitness for Older Adults (www.silversneakers.com): Silver Sneakers connects eligible older adults on some Medicare plans to free memberships at fitness programs across the nation. This website also offers general information about wellness and fitness for older adults.

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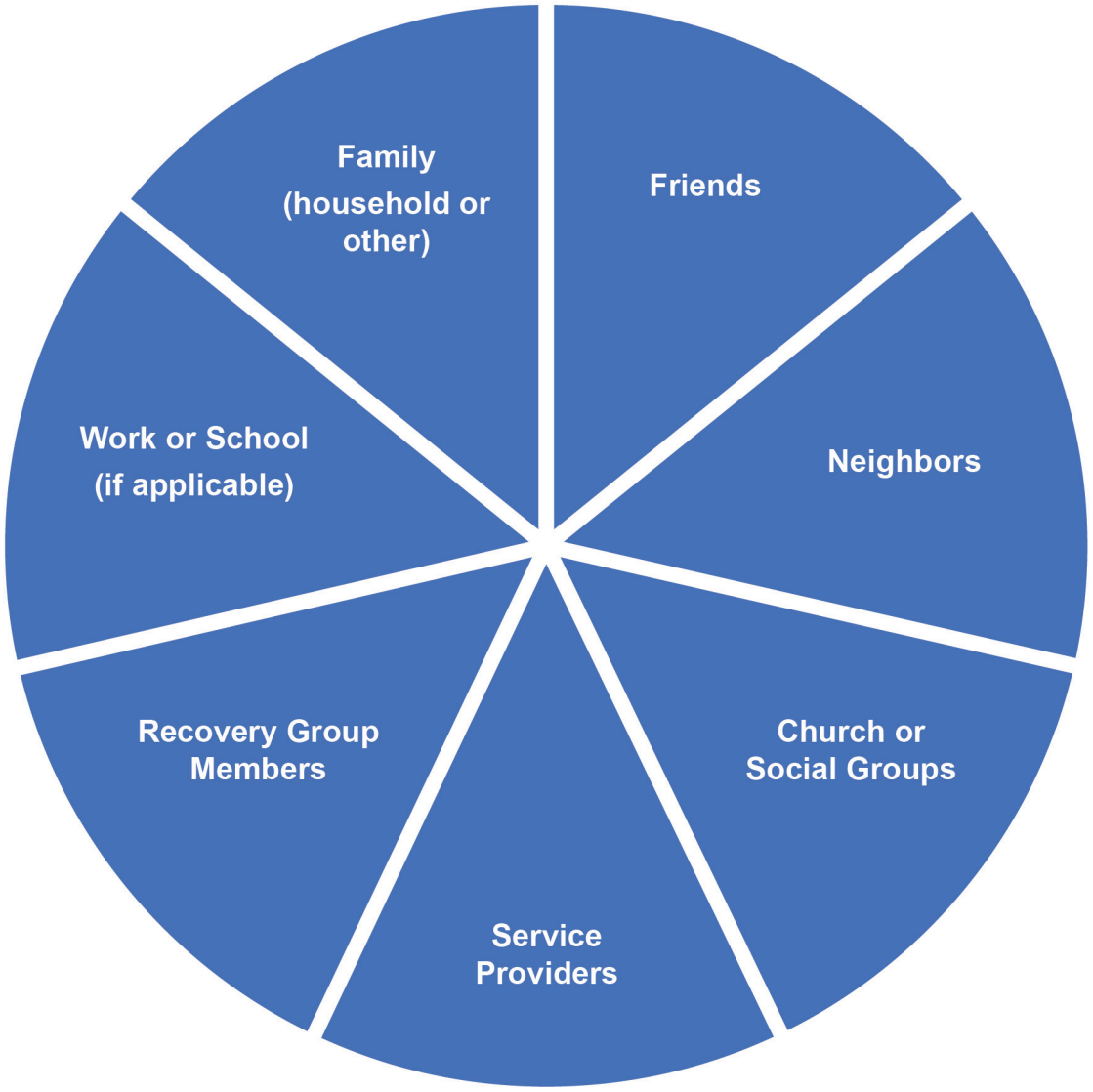
Chapter 7 Appendix

Assessing Social Support

The Social Network Map is a handy visual tool to help you and your clients identify members of their social network and the types of support they provide.[1217] It was developed as a clinical tool for assessing and broadening social support resources for families and has been used in studies to map social networks of older adults and adults with SUDs.[1218] The Social Network Map is a client-centered tool that collects information on the composition of older adults' networks, the extent to which network members provide different types of support, and the nature of relationships within the networks.[1219] The version depicted below is adapted for use with older adults in recovery.

SOCIAL NETWORK MAP FOR OLDER ADULTS IN RECOVERY



Adapted from Tracy & Whittaker (1990).[1220]

The following strategies[1221] will help you and your older clients develop a social network map:

- Create a pie chart with the seven domains. Health, behavioral health service, social service, and peer recovery support providers may be part of the support network clients identify.
- Ask older clients to identify members of their social networks by first name or initials only.
- Ask clients to describe how available (e.g., rarely, sometimes, often) each member of the network is to give emotional, instrumental, or informational support. Give examples and be specific:
  - "Who is available to give you emotional support like comforting you if you are upset or listening if you are stressed?" "How often does this person give you that kind of support?"
  - "Who is available to help you out in a concrete way like giving you a ride or helping with a chore?" "How often does this person give you that kind of support?"
  - "Who would give you information on how to do something new or help you make a big decision?" "How often does this person give you that kind of support?"
- Note the type and frequency of support each person listed in each domain can offer.
- Ask clients to describe how close they are to each member of their network, how long they have known them, and how frequently they see them.
- Ask clients to review the map and identify types of support that may be lacking and strategies for adding new network members to beef up their social support.

Assessing Isolation

Assess older adults' level of social isolation and explore all possible sources of social support they have. The **Lubben Social Network Scale (LSNS)** is designed for use with older adults. It measures social isolation and focuses on the nature of older adults' relationships with family and friends.[1222] Older clients can easily complete **the six-item short version (LSNS-6),** a self-report questionnaire. The LSNS-6 is available via www.bc.edu/content/bc-web/schools/ssw/sites/lubben/description.html.

For the LSNS-6, the total score (0–30) is an equally weighted sum of the scale's six items. A score below 12 indicates social isolation and need for further assessment.[1223] Low scores are associated with increased mortality, hospitalization for all causes, physical health problems, depression and other mental disorders, and low adherence to health-promoting activities.[1224] The Modified LSNS-R, with a "family of choice" subscale, was developed for use with lesbian older adults.[1225]

A screening tool like the LSNS-6 will give you an overall sense of the number of people in an older adult's life who provide support and the level of social isolation or social support the older adult is experiencing. The next step is to explore the kinds of social support older adults have or would like to have. This exploration will help you and your client generate strategies for increasing the diversity of social supports that promote health, wellness, and recovery.

Three types of social support enhance the health of older adults:

- **Emotional support** (e.g., feeling heard and understood, having help with reflecting on one's values, providing a sense that someone cares)
- **Instrumental support** (e.g., helping with finances, transportation, medication adherence)
- **Informational support** (e.g., providing information about community resources or the benefits of wellness and recovery activities, problem-solving, giving advice when asked)[1226]

Begin your conversation by describing the benefit of social support to people's health and well-being and give examples of the three types of support mentioned above. Then indicate that you would like to ask a few questions to see what kind of support your client already has.

Screening Instruments and Other Tools

The **Health Enhancement Lifestyle Profile (HELP)** is a validated assessment tool of older adults' habits and routines in health-promoting behaviors

in five of the eight dimensions of wellness. It is administered as either a self-report questionnaire or a structured interview.[1227] The HELP screening tool is a short version of the comprehensive assessment. It is a 15-item questionnaire that asks for "yes" or "no" responses. It is quick and easy to understand when administered to older adults as a self-report review of health-related lifestyle and wellness factors. (See page 32 of www.csudh.edu/Assets/csudh-sites/ot/docs/3%20Health%20Enhancement%20Lifestyle%20Profile%20(HELP)-Guide%20for%20Clinicians-2016.pdf for the screening tool.) The questions focus on exercise, nutrition, social support, recreational activities, and spirituality.

If further exploration is needed, focus the conversation with the client on items marked "no." For example, if the client marks "no" on the item about exercise, you might start with a nonjudgmental observation like *"I noticed that you normally don't exercise more than twice a week. Exercise can mean different things to different people. Tell me more about what you do for exercise."* This will open a conversation about physical activity and the client's understanding of what exercise is. Build on what the client is already doing before providing information about recommended guidelines or jumping in with advice about how to improve in that area.

The OARS approach is a person-centered communication approach used in motivational interviewing.[1228] You can use OARS throughout conversations with clients to help them feel relaxed, understood, and open to thinking about changing their pattern of substance misuse or engaging in wellness activities. Here are some examples of how to apply OARS to your discussions with older clients.

CLINICAL SKILLS: USING OARS IN CLIENT COMMUNICATIONS ON SUBSTANCE MISUSE

"O"—Open-ended questions: These questions help you learn more about the client's thoughts, feelings, and experiences. They are questions that cannot be answered with a simple "yes" or "no." Some examples are:

- "What do you think are some reasons for you to stop drinking?"
- "In what ways is not drinking important to you?"
- "How do you think your relationship with your daughter would be different if you were not using marijuana?"

"A"—Affirmations: These statements show support for the older adult's efforts to make difficult changes. Affirmations help the client build self-efficacy (a person's belief in his or her ability to do something, such as change a behavior). Examples of affirmations include:

- "Your willingness to discuss the risks of taking more pain medication than prescribed by your doctor fits right in with your health goals. I appreciate your willingness to talk about something that might be uncomfortable for you."
- "You are working hard to cut back on your drinking. When you set your mind to something you are determined to meet your goal."

"R"—Reflective listening: Reflective listening involves listening for the feelings or meaning of the client's statements and reflecting that meaning back to the client using his or her own words or paraphrasing. This shows that you are paying attention and trying to understand the client's perspective. Reflective listening also helps the client become more self-aware. You can use reflective listening by:

- Simply repeating key words or phrases back to the client.
- Rephrasing what the client said using your own words.

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- Reflecting the underlying meaning or feeling of the client's statement. Here is an example:
  - Client: "I started drinking more after my wife died. It just made the pain go away for a while. But then I fell and broke my hip one night after I had a few."
  - Provider: "Drinking helped you manage sadness temporarily, but then it started hurting your health."

"S"—Summarization: Summarizing is a form of reflective listening that ensures that you understand what the client has told you. It also helps you move the conversation to the next stage of the MI process. You can summarize by saying things like:

- "Let's review what we have talked about so far."
- "We covered a lot of topics this afternoon. Here's what it sounds like you're telling me."
- "You talked about your misuse of pain medications and how you have mixed feelings about that. You said that you are kind of scared to give them up completely, and the most important reason you can think of to taper off them is so you can have a better relationship with your grandson. Tell me a bit more about how important it is to have a better relationship with him and how getting off the medication will help you achieve that goal."

Chapter 8—Drinking as an Older Adult: What Do I Need To Know?

KEY MESSAGES

- As you age, alcohol can affect you more because:
  - Your body does not process alcohol as well as it used to.
  - You're more likely to be taking medications that interact negatively with alcohol.
  - You're more likely to have health conditions that will get worse if you drink alcohol.
- If you drink too much, reducing or cutting back on your alcohol consumption can improve your health and well-being.
- Family members, caregivers, friends, and other people in your life can help you quit or cut back on drinking.
- If you need treatment for a drinking problem, a range of effective options are available to you.
- Have hope! Many older adults are able to change their drinking habits to improve health and well-being.

Chapter 8 of this Treatment Improvement Protocol (TIP) benefits older adults, caregivers, and family members. It discusses the effects of alcohol and recommended guidelines for drinking in older adults. It will help older adults figure out whether they might have a drinking problem and how they can reduce or stop using alcohol. It will help families and friends recognize when an older adult in their lives is misusing alcohol and what they can do to support healthy changes in the older adult's drinking habits while also taking care of their own needs.

Older adults use alcohol more than any other substance.[1229] Drinking carries more risks for older adults, and they are at risk even when they drink less than younger adults. Physical changes that come with age increase sensitivity to alcohol. Other common changes in later life—like the death of a spouse or close friend, retirement, or a move to a different neighborhood or living situation—can lead to unhealthy drinking. But don't be discouraged! Older adults in treatment can do as well as or even better than younger adults do.[1230,1231,1232] That said, many older adults cut back on or quit drinking without specialized treatment.[1233,1234,1235]

Organization of Chapter 8 of This TIP

Chapter 8 is for older adults who drink (including those who have questions about how much they should drink), their families, and their caregivers. It provides information about how alcohol can affect older adults' changing bodies, health, and life circumstances.

The first section of Chapter 8 discusses drinking guidelines specific to older adults. It also lists reasons why some older adults misuse alcohol and lists some effects and warning signs of misuse.

The second section describes alcohol's health effects and the ways alcohol and medication interact.

The third section gives tips and cautions for addressing your drinking on your own.

The fourth section describes treatment options.

The fifth section educates older adults' families and caregivers about alcohol misuse.

The final section lists some helpful resources. A more detailed resource guide is in Chapter 9 of this TIP. Exhibit 8.1 defines some key terms you'll see as you read further.

EXHIBIT 8.1. Key Terms

- **Addiction*:** The most severe form of substance use disorder (SUD), associated with compulsive or uncontrolled use of one or more substances. Addiction is a chronic brain disease that has the potential for both recurrence (relapse) and recovery.
- **Alcohol misuse:** The use of alcohol in any harmful way, including heavy drinking, binge drinking, and alcohol use disorder (AUD).
- **At-risk/high-risk drinking:** Drinking alcohol in excessive amounts. This definition encompasses both binge drinking and heavy drinking. Additionally, any alcohol consumption is considered risky when carried out by individuals with certain medical conditions that are worsened by alcohol, those taking medicine that can interact harmfully with alcohol, those driving a car or engaged in other activities that require alertness, or people recovering from AUD.[1236,1237] Note that for purposes of this TIP, at-risk drinking and high-risk drinking are synonymous and either term is acceptable to describe an older adult's drinking patterns.
- **AUD:** A diagnosis that applies to people who have lost control of their drinking, continue to use alcohol despite negative consequences, and experience symptoms such as craving and withdrawal.
- **Binge drinking:** A drinking pattern that leads to blood alcohol concentration levels of 0.08 grams per deciliter or greater. This usually takes place after four or more drinks for women and five or more drinks for men.[1238,1239] However, older adults are more sensitive to the effects of alcohol, and treatment providers may need to lower these numbers when screening for alcohol misuse.[1240] Additionally, other factors such as weight, decrease in enzyme activity, and body composition (e.g., amount of muscle tissue present in the body) can also affect alcohol absorption rates.
- **Caregivers:** Informal caregivers provide unpaid care. They assist others with activities of daily living, including health and medical tasks. Informal caregivers may be spouses, partners, family members, friends, neighbors, or others who have a significant personal relationship with the person who needs care. Formal caregivers are paid providers who offer care in one's home or in a facility.[1241] Most older adults do not need caregivers and are as able to address their own needs as younger adults, whether or not substance misuse is a factor in their lives.
- **Heavy drinking:** Consuming five or more drinks for men and four or more drinks for women in one period on each of 5 or more days in the past 30 days.[1242]
- **Moderate drinking:** According to the 2015–2020 *Dietary Guidelines for Americans,* moderate drinking is defined as up to two drinks per day for men and up to one drink per day for women.[1243,1244] However, the Centers for Disease Control and Prevention (CDC) notes that these numbers apply to any given day and are not meant as an average over several days.[1245] Additionally, individuals who don't metabolize alcohol well may need to consume even lower quantities. Some people, particularly those with certain alcohol-related illnesses or engaging in tasks requiring concentration, should not consume alcohol at all. The *Dietary Guidelines* stipulate that those who don't drink should not begin drinking for any reason.[1246]
- **Peer support:** The use of peer recovery support specialists (for example, someone in recovery who has lived experience in addiction plus skills learned in formal training) to provide nonclinical (in other words, not requiring training in diagnosis or treatment) recovery support services to individuals in recovery from addiction and to their families.
- **Screening:** A process for evaluating the possible presence of a specific problem. The outcome is normally a simple yes or no.
- **Substance misuse*:** The use of any substance in a manner, situation, amount, or frequency that can cause harm to users or to those around them. For some substances or individuals, any use would constitute misuse (for example, underage drinking, injection drug use).
- **Substance use disorder*:** A medical illness caused by repeated misuse of a substance or substances. According to the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders,*[1247]

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SUDs are characterized by clinically significant impairments in health and social function and impaired control over substance use. They are diagnosed through assessing cognitive, behavioral, and psychological symptoms. SUDs range from mild to severe and from temporary to chronic. They typically develop gradually over time with repeated misuse, leading to changes in brain circuits governing incentive salience (the ability of substance-associated cues to trigger substance seeking), reward, stress, and executive functions like decision making and self-control. Multiple factors influence whether and how rapidly a person will develop an SUD. These factors include the substance itself; the genetic vulnerability of the user; and the amount, frequency, and duration of the misuse. Note: A severe SUD is commonly called an addiction.

* The definitions of all terms marked with an asterisk correspond closely to those given in *Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health.* This resource provides a great deal of useful information about substance misuse and its impact on U.S. public health. The report is available online (https://addiction.surgeongeneral.gov/sites/default/files/surgeon-generals-report.pdf).

Drinking Guidelines and Alcohol Misuse in Older Adults

What Is Moderate Drinking?

The *Dietary Guidelines* define moderate drinking as up to one drink a day for women and up to two drinks a day for men. Importantly, these numbers apply to any given day and are not meant to be interpreted as averages over numerous days.[1248,1249,1250]

To make sure that your drinking is not high risk, avoid binge drinking. Binge drinking means drinking more than three drinks (if you're a woman) or four drinks (if you're a man) per day. However, given the body's decreased ability to absorb alcohol with age, you may need to limit yourself to fewer drinks to avoid binge drinking.[1251]

Don't drink when you will be driving a car or boat or doing other activities that require you to be coordinated and alert.

Heavy or binge drinking at any age harms the brain.[1252] These patterns of drinking slow down communication among brain cells. Over time, heavy or binge drinking also shrinks the brain and changes it in other ways that negatively affect how it works. These changes can affect behavior; cause dementia; and worsen memory, coordination, and the ability to plan and learn.[1253,1254]

For some older adults, any amount of alcohol is risky.[1255] Don't drink if you:[1256,1257]

- **Have a chronic medical condition** that alcohol can worsen, like diabetes or heart disease.[1258,1259]
- Are recovering from AUD.[1260]
- **Take medications to help you worry less or sleep.** People often take a type of prescription medication called benzodiazepines to treat anxiety or sleeplessness.[1261]
- **Take opioid pain relievers,** which healthcare providers may prescribe for severe or chronic pain.[1262]
- Take other prescription or over-the-counter (OTC) medications that interact negatively with alcohol—that is, they may cause serious harmful effects if you take them and also drink alcohol.

For more information about how various medications interact with alcohol, see the "What Medications Interact With Alcohol?" section.

Why Do Experts Suggest Lower Limits for Older Adults?

The two main reasons for lower drinking limits are:

- You're more likely than younger adults to experience harmful alcohol–medication interactions.
- As you age, your body responds differently to alcohol.

You may have already noticed that you feel the effects of alcohol sooner than you used to, even if you don't take any medications. That's because age-related changes affect how your body handles alcohol.[1263,1264,1265] Exhibit 8.2 shows some of these age-related changes.

EXHIBIT 8.2. How Aging Affects the Body's Response to Alcohol[1266,1267,1268,1269,1270,1271]

DOES ALCOHOL USE OR MISUSE AFFECT OLDER WOMEN DIFFERENTLY THAN IT AFFECTS OLDER MEN?

If an older man and woman of about the same size and age drink the same amount of alcohol in the same amount of time, **the woman will get drunk sooner.** That's because the woman probably:[1272,1273,1274]

- Has less body water to dilute the alcohol.
- Has less lean muscle mass to absorb the alcohol.
- Has less of the enzyme that breaks down alcohol.

This means that **older women who misuse alcohol over time are likely to have more alcohol-related health problems** than older men who do so. These problems will likely appear sooner and be more severe.[1275]

Compared with older men, older women are also more likely to:[1276,1277,1278]

- Live alone longer, increasing their risk of drinking to cope with loneliness.
- Be less financially secure, increasing their risk of drinking to cope with financial worries.
- Take benzodiazepines, which have particularly harmful interactions with alcohol. (See the text box "Benzodiazepine Alert: Cautions for Older Adults Who Drink.")

Nevertheless, research suggests that **older women respond to alcohol treatment better than older men do.**[1279]

What Counts as One Drink?

To help you stay within the recommended limits, you need to know what counts as one drink.[1280] It may be less than you think. In the United States, a standard drink contains 14 grams of pure alcohol, or about 0.6 fluid ounces. Exhibit 8.3 shows standard drink amounts by beverage type.

EXHIBIT 8.3. What Is a Standard Drink?

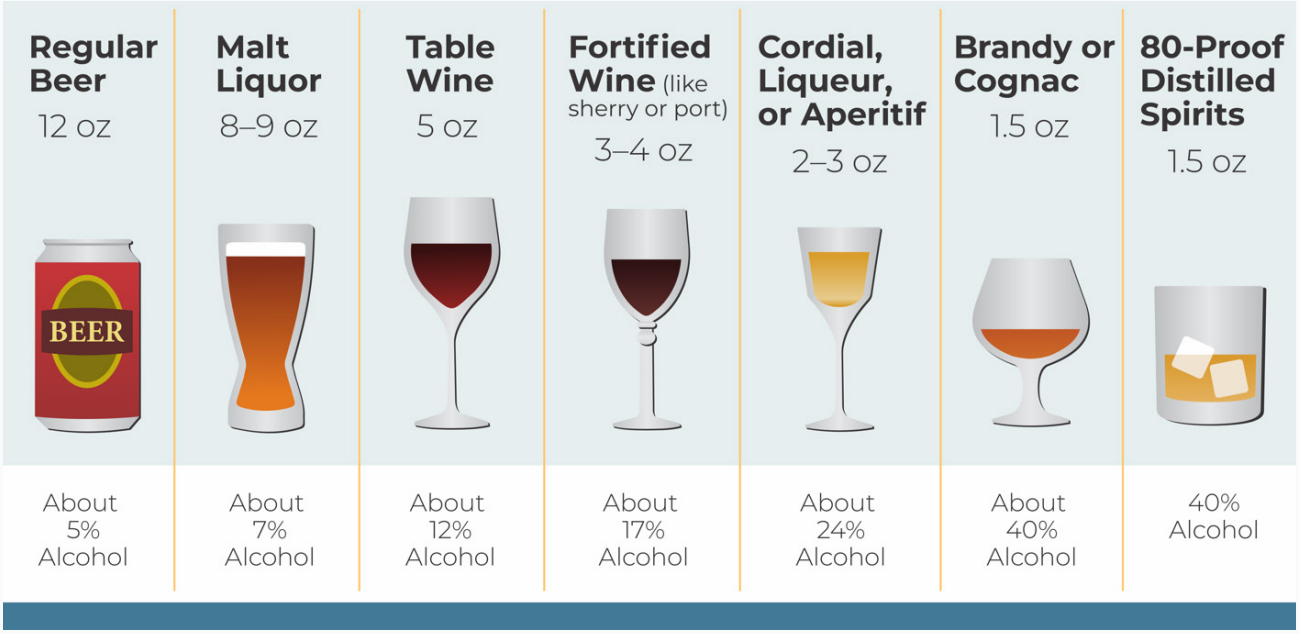


Image adapted from material in the public domain.[1281]

Alcohol content can vary by type of drink. Read container labels to see how much alcohol is in a serving.

What if you have a cocktail or mixed drink that combines a few different kinds of alcohol? You can figure out about how many standard drinks you're really consuming by using the Cocktail Content Calculator (www.rethinkingdrinking.niaaa.nih.gov/Tools/Calculators/Cocktail-Calculator.aspx) on the National Institute on Alcohol Abuse and Alcoholism's (NIAAA) Rethinking Drinking website. The calculator gives the alcohol content and standard drink equivalent for several common mixed drinks.

To keep track of your drinking, it helps to know the number of standard drinks in a bottle of wine or other type of alcohol container. NIAAA's Drink Size Calculator tells you how many standard servings are in many common kinds of beverage containers. It shows this information by type and strength of beverage (www.rethinkingdrinking.niaaa.nih.gov/Tools/Calculators/Drink-Size-Calculator.aspx).

ACTIVITY: HOW MUCH ARE YOU REALLY DRINKING?

For this activity, you'll need:

- Two glasses you typically use for drinking alcohol (the glasses must be identical).
- A measuring cup (make sure it's for liquids, not dry ingredients).
- The "What Is a Standard Drink?" diagram.

Using water instead of alcohol, fill one glass with what you think of as a single serving. Find in Exhibit 8.3 the standard drink amount for your type of drink. Fill the measuring cup with that amount of water, then pour it into the second glass. Compare the amounts in the two glasses.

What Can Cause Older Adults To Misuse Alcohol?

Alcohol misuse can begin or resume at any age. People who misuse alcohol may not always realize they are doing so. Stressful life changes that may lead to alcohol misuse in older adults include:[1282,1283,1284,1285,1286,1287]

- The death of a spouse, partner, child, or close friend.
- Increasing isolation.
- Increasing disability or a chronic illness.
- Forced or unplanned retirement.[1288]
- A change of residence.
- Increased financial strain.[1289]
- Boredom; lack of meaningful activity.
- Physical separation from adult children.

Spending time with people who drink is linked with alcohol misuse. For example, older adults may begin drinking too much after moving to a retirement community where drinking is a big part of socializing.[1290]

If your drinking patterns worsen in response to a change in your life, take action. The sections "How Can I Quit or Cut Back on My Own?" and "How Do I Talk to My Healthcare Provider About Alcohol Use?" can help you.

Some older adults use alcohol to cope with physical or emotional problems.[1291] This is called self-medicating. **Drinking to self-medicate can lead to alcohol misuse**[1292] and can actually worsen the problem instead of helping. For example, drinking to cope with depression can make symptoms of depression worse.[1293] Similarly, drinking to cope with sleep problems can worsen sleep by reducing time spent in deep sleep and by causing snoring and other problems that interfere with sleep.[1294,1295]

Also, what was low-risk drinking when you were a younger adult can become alcohol misuse as you age, simply because your body does not handle alcohol as well as it used to. Refer back to Exhibit 8.2.

Healthcare providers sometimes mistake AUD for other conditions that are common in older adults. Some providers wrongly believe that older adults are not likely to develop AUD. These are good reasons for you to educate yourself about alcohol misuse in older adults.

How Can I Tell Whether I'm Misusing Alcohol?

Ask yourself whether any of these possible signs and symptoms of alcohol misuse apply to you:

- Cognitive symptoms:
  - Feeling confused after drinking[1296]
  - Having memory problems[1297]
- Physical and mental symptoms:
  - Having problems with balance[1298]
  - Falling after drinking[1299]
  - Feeling clumsy[1300]
  - Experiencing incontinence[1301]
  - Slurring words[1302]
  - Continuing to drink even if you take medication that interacts negatively with alcohol
  - Continuing to drink even if you have a medical condition made worse by alcohol

- Social symptoms:
  - Having relatives or friends who are concerned about your drinking[1303]
  - Losing friends because of your drinking[1304]
- Behavioral symptoms:
  - Bathing or showering infrequently[1305]
  - Taking less care of your appearance[1306]
  - Taking less care of your living space[1307]
  - Spending too much money on alcohol[1308]
  - Skipping meals because of drinking[1309]
  - Putting oneself in risky situations (like driving, having unsafe sex) while drinking[1310]

If you have experienced or are experiencing any of these warning signs, consider speaking with your healthcare provider or an addiction specialist about your drinking. Also see "What Should I Expect During My Medical Appointment?" and "What Are My Options for Specialized AUD Treatment?"

Contact your healthcare provider if you:

- Drink despite taking one or more medications that have severe interactions with alcohol.
- Have had symptoms of alcohol withdrawal. See the text box titled "Warning Signs of Alcohol Withdrawal" for more information.

Alcohol's Effects on Older Adult Health

Can Drinking Cause or Worsen Health Conditions?

Alcohol misuse causes or increases your risk of developing more than 200 health conditions.[1311] Drinking also worsens many health conditions common among older adults, including diabetes, high blood pressure, osteoporosis, pain, sleep problems, stroke, and urinary incontinence.[1312,1313,1314,1315,1316]

Alcohol misuse can also make it harder for you to manage any chronic medical conditions you already have. For example, you may skip meals, forget to exercise, or mix up medications.

Alcohol misuse may put you and others at risk of injuries and other harms, like HIV. Harms linked with alcohol misuse by older adults commonly result from falls, motor vehicle crashes, and suicide attempts.[1317,1318,1319] Alcohol misuse can also lead to risky sexual behavior (such as having unprotected sex with a new partner), which can spread HIV or other sexually transmitted diseases.[1320,1321,1322,1323]

What About News Reports That Say Light or Moderate Drinking Is Healthy?

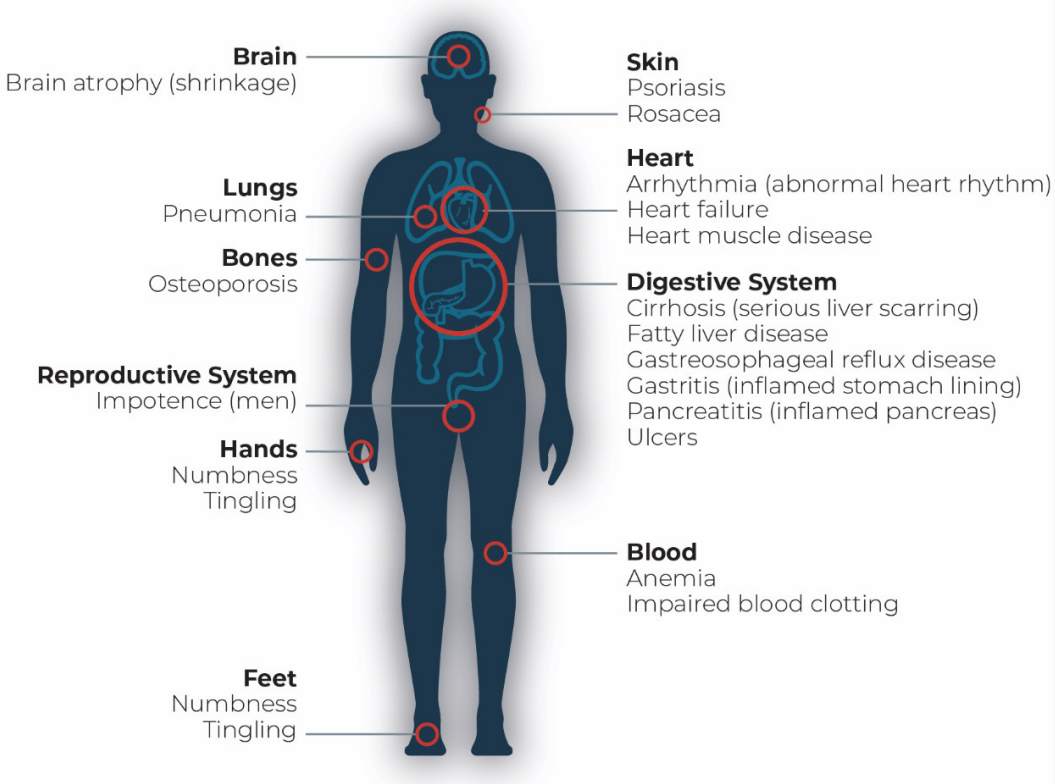
Don't base decisions about drinking on news reports of alcohol's benefits. News stories don't always clarify whether a study found that alcohol **causes** or is simply **associated with** a health benefit. If a study shows that alcohol is only associated with a health benefit, other factors like genetics or income level may have also played a role.[1324] The report may ignore a study's limitations.[1325] For example, the results of a study with only younger participants may not apply to older adults.

You and your healthcare provider should weigh the possible benefits of light or moderate drinking with the known negative effects of alcohol use, especially if you:

- Take medication that interacts badly with alcohol.
- Have a history of alcohol misuse.
- Have, or are at risk for, a medical condition worsened by alcohol.

Exhibit 8.4 presents just some of the health conditions linked to alcohol misuse.

EXHIBIT 8.4. Some Health Risks of Alcohol Misuse[1326,1327,1328,1329,1330,1331,1332,1333,1334,1335]



Drinking is also linked with many types of cancer:

Breast (women)	Larynx	Mouth	Stomach
Colon	Liver	Pancreatic	Throat
Esophageal	Lung	Rectal	

What Medications Interact With Alcohol?

Many older adults who drink regularly take prescription medications that interact harmfully with alcohol.[1336,1337] **Drinking makes some medications less effective and can make others more potent.** The results can be unpleasant, dangerous, and even deadly.[1338]

> Alcohol and medication can make a dangerous mix, even if you do not consume them at the same time.[1339]

If you drink, ask your healthcare provider whether alcohol can interact harmfully with any of your medications. Negative interactions may occur even if you don't see signs or symptoms like vomiting or dizziness right away. Serious effects of alcohol–medication interactions, like liver damage, can develop "silently" over time.[1340]

Dietary supplements (e.g., vitamins, herbal products) and OTC medications (like aspirin) can interact harmfully with alcohol. Talk to your healthcare provider if you take any of these products and drink.[1341]

ACTIVITY: CHECK YOUR MEDICATIONS FOR ALCOHOL INTERACTIONS

Check labels on prescription bottles for warnings about drinking while taking the medication. If the medication came with a printed "Patient Package Insert" or "Medication Guide," check for additional warnings on alcohol use. If you have questions about your medication and alcohol use, talk to your pharmacist or healthcare provider.

Check the "Drug Facts" labeling for your OTC medications: Look under "Warnings" for any mentions of alcohol.

Information that comes with prescription and OTC medications usually does not include warnings specifically for older adults. If you're unsure whether you can drink while taking a medication, be safe and don't drink.[1342]

Exhibit 8.5 lists 12 medications that interact badly with alcohol. Many older adults take these and similar medications. This list is provided for illustration only. Other medications for the same condition may have different interactions, and many conditions are not included. For more comprehensive lists, see the entries under "Alcohol and Medication Interactions" in the "Resources" section at the end of this Chapter.

EXHIBIT 8.5. Common Prescription Medication–Alcohol Interactions[1343,1344]

CONDITION	MEDICATION EXAMPLE	POSSIBLE INTERACTIONS WITH ALCOHOL
Anxiety	Clonazepam	Increased dizziness, drowsiness, and memory problems; decreased coordination; increased risk of fatal overdose[1345]
Arthritis	Naproxen	Ulcers, stomach bleeding, liver damage
Blood clots	Warfarin	Internal bleeding with occasional or heavy drinking; increased risk of blood clots, strokes, or heart attacks with heavy drinking
Cough	Dextromethorphan	Drowsiness, dizziness, difficulty concentrating,[1346] higher overdose risk
Depression	Sertraline	Increased depression, drowsiness, dizziness
Diabetes	Metformin	Very low blood sugar (symptoms: dizziness, drowsiness, confusion), lactic acidosis (symptoms: muscle pain, slow heartrate, dizziness)
Heartburn	Ranitidine	Rapid heartbeat; increased alcohol levels[1347]
High blood pressure	Lisinopril	Dizziness, drowsiness, fainting, weakness from low blood pressure,[1348] heart problems such as changes in the heart's normal rhythm
High cholesterol	Simvastatin	Liver damage
Insomnia	Zolpidem	Drowsiness, dizziness, sleepiness, slowed or difficult breathing, loss of coordination, unusual behavior, memory problems
Pain	Ibuprofen	Stomach bleeding and ulcers
Pain (severe)	Oxycodone	Drowsiness, dizziness, slowed or difficult breathing, loss of coordination, unusual behavior, memory problems, increased risk for fatal overdose

BENZODIAZEPINE ALERT: CAUTIONS FOR OLDER ADULTS WHO DRINK

Prescription benzodiazepines mainly treat anxiety or insomnia.[1349] Common benzodiazepines include:

- Alprazolam (Xanax, Xanax XR).
- Diazepam (e.g., Valium, Diastat).
- Clonazepam (Klonopin).
- Lorazepam (Ativan).

Drinking while taking benzodiazepines puts you at great risk. Alcohol and benzodiazepines slow down critical bodily functions like breathing and heartbeat. **Combining them can cause blackouts and even death.**[1350,1351]

If you drink alcohol at all and take benzodiazepines, tell your healthcare provider. Also ask whether you should try a different approach to treating the condition for which you take the benzodiazepines. If you and your healthcare provider decide you should keep taking the medication, even at a reduced dosage, that's a good reason for you to quit drinking.

Don't change benzodiazepine use on your own. You need medical advice when stopping or reducing benzodiazepine use. Your healthcare provider should give you a schedule to slowly reduce (taper) your dosage. Tapering helps avoid benzodiazepine withdrawal. Tapering also makes it less likely that the symptoms the medication treated will return.[1352] Many older adults end or reduce benzodiazepine use through tapering alone, but you may also need counseling, such as cognitive–behavioral therapy (CBT), to achieve this goal.[1353]

Here are some more tips on avoiding negative interactions between alcohol and your medications:

- Ask your healthcare provider or pharmacist whether a newly prescribed medication interacts harmfully with alcohol, even if you don't drink often.
- **Never take prescription medication offered to you by a family member or a friend,** especially if you drink. The medication was prescribed with someone else's medical situation in mind, not yours. Taking it could harm you. In some cases, sharing prescription medications is illegal.
- Check the ingredients of cough and cold medications and laxatives, which may contain alcohol.

OPIOID ALERT: CAUTIONS FOR OLDER ADULTS WHO DRINK

Prescription opioid medications mainly treat severe or ongoing pain. Common opioid medications include:

- Codeine.
- Meperidine (Demerol).
- Hydrocodone combined with acetaminophen (e.g., Vicodin, Lorcet).
- Oxycodone (e.g., OxyContin).
- Oxycodone combined with acetaminophen (e.g., Percocet).

If you take opioid pain relievers and also drink alcohol, you put yourself at especially high risk for overdose, confusion, unusual behavior, and serious injury.[1354,1355] Let your healthcare provider know immediately if you take opioid pain relievers and you drink, even just occasionally.

You and the healthcare provider who prescribed the opioids should discuss whether to treat your pain in a different way. Keep in mind that many alternative pain medications also interact harmfully with alcohol.[1356]

If only prescription opioids control your pain, you need to quit drinking while taking them. Talk with your provider about how to stop drinking safely.

Tips and Cautions for Addressing Drinking on Your Own

Is Alcohol Withdrawal a Concern?

If you drink more than is recommended for older adults—especially if you drink heavily or have been drinking regularly for a long time—**don't sharply cut back on your drinking or suddenly quit on your own. Get medical advice first.** Your body may be dependent on alcohol, so you could experience withdrawal if you go without drinking for longer than usual.[1357] Severe alcohol withdrawal can be deadly if not treated right away in a hospital.[1358,1359]

WARNING SIGNS OF ALCOHOL WITHDRAWAL

Symptoms may occur up to 7 days after your last drink. They may vary in severity[1360] and include:[1361,1362,1363,1364]

- Agitation.
- Anxiety.
- Diarrhea.
- Headache.
- Raised blood pressure.
- Increased pulse rate.
- Insomnia.
- Nausea.
- Sweating.
- Tremor.

Delirium tremens (also known as DTs) is the most severe form of alcohol withdrawal.[1365] **It can be fatal and must be treated in a hospital.** It can develop 2 to 10 days after the last drink.[1366] Possible symptoms include rapid heart rate, intense tremor, extreme agitation, confusion, fever, drenching sweats, and coma.[1367]

How Can I Quit or Cut Back on My Own?

Consider Why You Want To Change Your Drinking Habits

Think about how drinking conflicts with your top values—values you want your life to reflect, like independence, generosity, health, and honesty. Try these value-identifying exercises available online:

- www.smartrecovery.org/smart-recovery-toolbox/values-and-goals-clarification
- https://harvard.az1.qualtrics.com/jfe/form/SV_e35whN7tkXtvlHv (interactive)
- www.therapistaid.com/worksheets/values-clarification.pdf

Feel free to add any of your own top values that you don't see listed in these exercises. Here are just a few possibilities: alertness, dependability, and empathy. The activity below will help you understand the relationship between drinking and your top values.

ACTIVITY: DOES YOUR DRINKING CONFLICT WITH YOUR TOP VALUES?

Think about your top values in life—the principles, qualities, and beliefs most important to you that you want your life to reflect. Does drinking conflict with any of your top values? If so:

Which values does drinking conflict with?

_____

_____

_____

_____

_____

_____

How does drinking conflict with these values?

_____

_____

_____

_____

_____

_____

How does this conflict keep you from living out your top values in your daily life? Be as specific as possible.

_____

_____

_____

_____

_____

_____

Make a Plan for Change

Writing a plan for change (Exhibit 8.6) will help you set and keep goals for cutting back or quitting drinking. Before making a plan, look at your answers to the "Does Your Drinking Conflict With Your Top Values?" activity. Consider first reading the "How Can I Get Support From Family and Friends?" section.

EXHIBIT 8.6. Writing a Change Plan

Goal (pick one):

____ I want to drink no more than ____ drink(s) per day and no more than ____ drink(s) per week. (See "What Is Moderate Drinking?" before filling out.)

____ I want to stop drinking.

I will begin following my plan on this date: _____.

My most important reasons for changing my drinking are:_____

_____

_____

The situations where I may be most tempted to drink are:_____

_____

_____

_____

Some things I will do and say to handle these situations are:_____

_____

_____

_____

The people who can help me stick to my goal, and the ways they can help, are:_____

_____

_____

_____

Adapted from material in the public domain.[1368]

Pace Yourself When You Drink

Your main goal is to cut back and slow down your alcohol consumption when you drink. Try:[1369,1370,1371]

- Putting your drink down between sips.
- Holding something in your hand besides your drink between sips.
- Following an alcoholic drink with a nonalcoholic one.
- Eating something while you drink—but avoid foods that make you thirsty.

Track Your Drinking

Using a drinking tracker card (Exhibit 8.7), **write down how many drinks you have each day.** This will help you keep better track of your drinking as you work to cut back or quit.[1372]

EXHIBIT 8.7. Four-Week Drinking Tracker Card

GOAL: No more than ____ drinks on any day and ____ per week.

Week starting	Su	M	T	W	Th	F	Sa	Total
____/____								
____/____								
____/____								
____/____								

Reprinted from material in the public domain.[1373]

Find Alternatives to Drinking

You may drink out of habit, boredom, or loneliness, or when you're with friends who drink. Try to find other activities that appeal to you and fit your abilities and budget. Here are some ideas:

- Participate in recreation programs at your local community recreation center or senior center. (Be sure to consult with your healthcare provider before increasing your physical activity.)
- Put your experience and gifts to use by volunteering at a nonprofit organization or a school.
- Join a book discussion group hosted by a local library or bookstore.

Think about what your interests are and how you can make them a bigger part of your life.

Have a Plan for Dealing With Challenging Situations

Some occasions, like holiday parties or anniversaries of losses, may tempt you to drink or to drink too much. So may being around people or places that remind you of drinking. **You can fight temptation better if you have a plan for handling such situations.**[1374] For example, you could plan to spend the evening of a difficult anniversary with an understanding friend. A written plan (Exhibit 8.6) can help you remember what steps to take to avoid temptation.

Join a Mutual-Help Group

Another action you can take is to join a mutual-help group. **Members of these groups support each other in their recovery from the misuse of alcohol and other substances.** Mutual-help groups meet regularly, are free, and usually take place in community spaces, such as houses of worship and schools.

Some groups follow the 12-Step approach, which has abstinence as its goal.[1375] Alcoholics Anonymous (AA) was the first 12-Step group. To find a meeting, go to www.aa.org/pages/en_US/find-aa-resources or look in your local newspaper or community newsletter. Some communities have meetings designated as senior friendly.[1376] If you have difficulty getting around, you can check out AA's online and telephone meetings (https://aa-intergroup.org/directory.php).

For older adults-only meetings, look into Seniors In Sobriety (SIS), which is part of AA. The SIS website (www.seniorsinsobriety.com) provides a list of meetings.

Alternatives to traditional 12-Step organizations include:

- SMART (Self-Management and Recovery Training) Recovery (www.smartrecovery.org).
- Women for Sobriety (https://womenforsobriety.org).
- Secular Organizations for Sobriety (www.sossobriety.org).
- Moderation Management (www.moderation.org).

You can find faith-based mutual-help organizations at www.recoverymonth.gov/resource-category/faith-based.

Consider dropping by a mutual-help group meeting to see whether it's a good fit for you. Call the local office or contact person first to make sure that the meeting is open to the public. If you want to attend a meeting but feel a little uncomfortable with the idea, think about going with a friend.

MOBILE APPS

If you have a smartphone or tablet, you have access to many free mobile apps that can help you overcome alcohol misuse, including addiction. Common features of these apps include:[1377,1378]

- Counters showing how long you've been alcohol free (some go down to the minute or second).
- Calculators showing how much money and time you've saved by not drinking.
- Support-meeting locators.
- Community forums for sharing information and support anonymously.
- Daily inspirational messages.
- Progress notifications.
- Virtual rewards, like "coins" or "trophies," for milestones achieved.

Examples of such apps are I Am Sober (https://iamsoberapp.com) and Nomo - Sobriety Clocks (https://saynomo.com).[1379]

When It's Time To Get Help

How Do I Talk to My Healthcare Provider About Alcohol Use?

- If you have questions about your alcohol use or think you need help addressing it, you may need to raise the subject with your healthcare provider yourself. That's because some healthcare providers:
  - Feel uncomfortable asking an older adult about his or her alcohol use.[1380]
  - May mistake an older adult's alcohol misuse for another health condition.[1381]
  - Believe there's no point in encouraging an older adult to stop or reduce drinking.[1382]

Here are some **ideas for starting the conversation:**

- "I'm on several medications, so is it a problem that I have a couple of drinks in the evening?"
- "It takes me awhile to fall asleep, so I have a nightcap. Is that okay, given my medical conditions?"
- "My wife says I drink too much at parties. I'd like to know what you think."

Whether **you** raise the subject of alcohol use or your healthcare provider does, be honest about how much and how often you drink. Your health and even your life may depend on it.

What Should I Expect During My Medical Appointment?

Screening

If you bring up alcohol concerns with your healthcare provider, he or she will likely ask you to answer a screening instrument or questionnaire. The most common alcohol screening instruments have just 1 to 10 questions. Your healthcare provider may ask you the questions directly, or you may answer them on paper or on a computer or tablet. Examples of alcohol screening questions are "Have you ever felt you should cut down on your drinking?" and "Do you usually take a drink to calm your nerves?"[1383,1384]

Screening helps your healthcare provider decide whether to look further into your alcohol use. It will also help you and your healthcare provider decide whether you may need specialized treatment to address alcohol misuse.

Assessment

If screening suggests that you misuse alcohol, your healthcare provider will probably do an "assessment" or refer you to a specialist who can do it. Whoever does the assessment will ask you more questions about how much and how often you drink. **The assessment will help your healthcare provider understand any negative effects of your drinking, your drinking history, and any previous treatment you may have had for misuse of alcohol or other substances.** Other assessment questions may focus on your living situation and degree of support from family and friends.[1385] You will likely have a physical exam, and you may also have lab tests to check for alcohol use and any resulting damage to your liver or other organs.

What Typically Happens Next?

During this or a follow-up visit, your healthcare provider should give you more information and feedback about your drinking. The feedback will help you understand the results of the assessment and lab tests. Any other information you receive may help explain the risks and health effects of your alcohol use. Your healthcare provider may diagnose you with AUD if you meet certain criteria.

CAN MEDICATION TREAT AUD?

The Food and Drug Administration has approved three medications for treating AUD.[1386] All three require a prescription. If you receive a prescription for any of them, you'll need to take the medication for at least 3 months[1387] and probably longer.[1388] Although these medications don't work for everyone, they do **appear to be as safe and effective for older adults as they are for younger adults.**[1389]

Not all healthcare providers prescribe these medications. You may need to see an addiction specialist or psychiatrist if you want to explore this approach to treatment. Most people who take medication for AUD do better if they receive counseling too, especially early in treatment.[1390]

Some people incorrectly regard taking medication for AUD as substituting one addiction for another. You may even encounter this attitude in certain addiction treatment programs.[1391] However, **none of these medications is addictive. Using them is like taking medication for any other chronic illness,** like diabetes or asthma.[1392]

You may also receive a referral to an addiction specialist or an addiction treatment facility, depending on your level of alcohol use and health status.[1393] You should seek someone who specializes in addiction treatment with older adults who have been using alcohol for a long time or who have health conditions that could complicate treatment for alcohol misuse. Your healthcare provider **may also refer you to a mutual-help group like AA.**[1394]

What Are My Options for Specialized AUD Treatment?

If you receive specialized treatment for AUD, you may move from one setting to another as the treatment proceeds. Whatever the setting, you will usually get counseling and education about alcohol misuse. Personal preference, availability, and eligibility requirements can affect your decision on where to get treatment. Cost can also affect your decision. Check with your health insurer to see how much coverage it provides for the treatment option you seek.

The following list describes the main specialized treatment options:

- **Regular outpatient treatment typically consists of individual therapy, group therapy, or both,** provided by a trained therapist. Additional services, such as family therapy and connection

RESOURCE ALERT: TREATMENT LOCATOR FOR VETERANS

If you are a veteran or are covered by health benefits for veterans, the Department of Veterans Affairs (VA) can help you find VA services close to you. Use the VA SUD Program Locator at www.va.gov/directory/guide/SUD.asp for your search.

to mutual-help groups, may be included.[1395] Some outpatient treatment is provided by healthcare providers or addiction specialists. In addition to doing assessments and diagnosing AUD, these specialists may provide counseling and prescribe medications for AUD. Outpatient programs differ a lot in how long they last and how intensive they are.

- **Medically supervised withdrawal is a process during which healthcare providers monitor you** as your body clears itself of alcohol. This process is sometimes called detoxification, or "detox." In medically supervised withdrawal, medical staff monitor and treat withdrawal symptoms and manage other health conditions as needed.[1396] Medically supervised withdrawal in an inpatient setting, such as a hospital, is normally recommended for older adults.[1397] If you undergo medically supervised withdrawal, you may receive referrals from the medical staff to addiction counselors or other behavioral health service providers for continuing treatment of AUD. If no referral is offered, you can ask for one or explore other options for continuing treatment or recovery support, such as attending AA meetings or using a treatment locator like FindTreatment.gov or the Substance Abuse and Mental Health Services Administration's (SAMHSA) National Helpline (1-800-662-HELP).
- **Intensive outpatient programs typically provide services at least 3 days a week,** for at least 2 or 3 hours each day (or evening).[1398] These services can include group and individual counseling, family therapy, medical and mental health evaluations, medication, and education about addiction and coping skills.[1399,1400] These programs may take place at hospitals, mental health clinics, or office-based private practices.
- **Partial hospitalization programs typically run 4 to 6 hours a day, 3 to 7 days a week.** They are also called day treatment programs. As with intensive outpatient programs, you do not stay overnight for treatment. These programs often treat addiction and mental disorders at the same time.[1401]
- **Specialized residential treatment facilities usually offer group and individual therapy, recreational activities, and mutual-help group meetings.** Consider this type of facility if you would have difficulty getting to and from outpatient treatment or if you need more counseling, medical services, or ongoing guidance than an outpatient program would offer.

WHAT ARE RESIDENTIAL TREATMENT FACILITIES?

These facilities range from small group homes or recovery houses with few staff and services to specialized facilities with intensive, highly structured programs that keep physicians and nurses on staff. People staying in group homes or recovery houses may get outpatient treatment at another facility. A residential facility may be a good option for you if you think you'd do better in treatment while away from your home or neighborhood.[1402]

How Do I Pick a Treatment Program?

NIAAA's Alcohol Treatment Navigator recommends **10 general questions to ask when looking for a quality alcohol treatment program.** The Navigator is available online (https://alcoholtreatment.niaaa.nih.gov/how-to-find-alcohol-treatment/10-questions-for-alcohol-treatment-programs).

Think about the issues you most want help with in treatment. Ask the programs you're considering whether they address these issues. You may also want to ask:[1403]

- Does the program focus just on older adults or have a special track or groups for older adults?
- Does the program cover topics like grief, loss, and isolation?
- Can an older adult who uses a wheelchair/walker/cane easily enter and move around the facility?
- What modifications will the program make for older adults with vision/hearing problems?
- Do I need my own transportation to get there?

If you can't find a program just for older adults even though that's what you want, consider one that mixes age groups. Research shows that older adults can also do well in these programs.[1404,1405] If possible, take tours of the facilities that you are considering.

RESOURCE ALERT: SAMHSA'S FREE NATIONAL HELPLINE

SAMHSA's free National Helpline at 1-800-662-HELP (4357) can refer you to SUD treatment facilities that accept Medicare or Medicaid. If you are uninsured, check this SAMHSA directory for the agency in your state to contact about possible help with paying for addiction services: www.samhsa.gov/sites/default/files/ssa-directory-01212020.pdf.

COMMON TYPES OF THERAPY

As part of inpatient or outpatient treatment, you'll likely participate in one or more forms of therapy to help you address the feelings and behaviors that led to your alcohol misuse. Some of the most common therapies are briefly described below. Often, two or more of these therapies are used together.[1406,1407]

Acceptance and commitment therapy encourages people to live a satisfying life by accepting losses that are final, reconnecting with their values, and working toward goals that reflect those values.[1408]

Example: Through therapy, a man who began drinking heavily alone after his wife's death recognizes that drinking conflicts with the value he places on being an involved grandfather. He could enter alcohol treatment with the goal of becoming abstinent so that he can spend more time with his granddaughter.

Behavioral couples therapy (BCT) seeks to encourage abstinence in someone who misuses substances by improving his or her relationship with a spouse or partner through better communication, shared activities, and positive reinforcement. The spouse or partner also participates in the therapy.

Example: Through BCT, a husband agrees to discuss his wife's drinking **only** during a set time each day, and both he and she agree to end the discussion with words of appreciation for each other.[1409]

CBT involves working with a therapist to identify and change unhelpful thought processes that trigger alcohol misuse and to develop healthier behaviors to replace drinking.[1410,1411]

Example: A man worries that he won't fit in with his golf group if he stops drinking with them after games. After talking about his beliefs and thoughts with his therapist, he could experiment with having only nonalcoholic drinks after games and realize that he's not bothered by his golf partners' reactions.

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Coping skills therapy focuses on dealing with difficult thoughts (including cravings), emotions, and situations in ways that don't involve alcohol. Goals include learning how to manage anger and stress, become more assertive, and avoid people and places that encourage drinking.[1412]

Example: A woman who drinks after phone calls with her argumentative brother might role-play with a therapist how to change the subject during an argument or limit the length of calls.

Family therapy ideally involves the entire family of a person in treatment for AUD and seeks to improve how family members relate to each other. The goals are to support both the recovery of the individual in treatment and the family's well-being.[1413]

Example: Through family therapy, a widow who had avoided interacting with her two adult children because of her secret alcohol misuse could work on repairing her relationships with them. They in turn could become more understanding by learning how she drank to cope with their father's death.

Mindfulness-based relapse prevention (MBRP) is a group therapy approach that combines teaching mindful meditation practices and traditional relapse prevention techniques, such as how to refuse drinks. Mindfulness helps you accept awareness of impulses to drink and develop the ability not to act on them.[1414]

Example: Through MBRP, a woman who used to unwind from her job by drinking heavily at home after work could instead use breathing techniques and guided meditations on audiotapes to calm her mind.

Motivational interviewing is an approach for overcoming unhealthy habits in which the therapist helps the client explore and strengthen the desire for change, and then develop and act on a plan for change.[1415]

Example: A man who takes heart medication and socializes mainly at his independent living facility's daily happy hour could, through motivational interviewing, decide that he doesn't want to risk a medication–alcohol interaction. He could do his socializing instead after the facility's nightly movie showing.

Relapse prevention therapy helps people recognize and plan to respond constructively to high-risk situations for, or warning signs of, a return to alcohol use.

Example: A woman at risk of drinking when alone at night could work with a therapist to find activities to do instead of drinking, such as coloring or scrapbooking.

How Can I Get Support From Family and Friends?

Don't be embarrassed or shy about involving supportive family members and friends in your effort to quit or cut back on drinking. They will probably want to help, especially if they have already told you they are concerned about your drinking. Consider asking them to:[1416,1417,1418]

- Avoid drinking in front of you.
- Offer you just nonalcoholic beverages.
- Join you in alcohol-free activities.
- Go along when you discuss your drinking with a healthcare professional, to help you take notes and to provide support.
- Accompany or drive you to mutual-help group meetings.
- Be available to talk to you if you get an urge to drink.

Another way that family members can help is by participating in family therapy or BCT with you, if you are in treatment and your provider recommends such therapy. For more information, refer family members to SAMHSA's *Family Therapy Can Help* booklet, which is available at no cost (https://store.samhsa.gov/product/Family-Therapy-Can-Help-For-People-in-Recovery-From-Mental-Illness-or-Addiction/SMA15-4784).[1419]

Also consider asking any family members that you live with to keep little or no alcohol at home.[1420]

WHAT IF MY FAMILY AND FRIENDS ARE NOT SUPPORTIVE?

What if you are uncomfortable asking those around you to actively support your abstinence, or you do ask but don't get a positive response? First, don't isolate yourself.[1421] Instead, consider joining a mutual-help group and/or working with a recovery coach or peer recovery support specialist. This individual, who often has personal experience with addiction, acts as a mentor and a motivator. He or she can also help you find alcohol treatment. Some are volunteers and some are paid by you or a third party.[1422]

How Can I Encourage Myself?

First, give yourself credit for realizing that you may need to do something about your drinking. Remember that many different treatment options are available for alcohol misuse. These options have enabled many older adults like you to stop or reduce their alcohol consumption.[1423] Congratulate yourself on any action you take to limit how much you drink. In addition, remind yourself that, no matter what your age, overcoming alcohol misuse can help you feel better and live longer.

Information for Family and Caregivers

What Can I Do as a Caregiver or Family Member?

Know the Warning Signs of Alcohol Misuse

If you think a family member may be misusing alcohol, review the list of warning signs in the "How Can I Tell Whether I'm Misusing Alcohol?" section. Other signs to look for include:[1424,1425]

- Hiding alcohol supplies.
- Denying or justifying drinking.
- Refusing to discuss drinking.
- Becoming annoyed when asked about drinking.[1426]
- Becoming aggressive or abusive.
- Displaying excessive mood swings.
- Having new problems with decision making.[1427]
- Appearing sleepy during the day.
- Falling behind on bills.
- Having unexplained burns or bruises.[1428]
- Having frequent car accidents.
- Talking about or attempting suicide.

Suicide attempts and talk of suicide require immediate attention. Call 911 if your family member attempts or threatens suicide. Call your family member's healthcare professional or the National Suicide Prevention Lifeline (1-800-273-8255) if you worry that he or she is thinking about suicide. Note that by July 2022, you will also be able to reach this hotline by dialing 988.

CHALLENGES TO RECOGNIZING ALCOHOL MISUSE

Alcohol misuse among older adults often goes unrecognized. These three examples illustrate the problem:

- A healthcare provider who cares for an older woman assumes that the broken capillaries on her face are the result of old age rather than her heavy drinking.
- An older man who drinks as much as he did in middle age does not realize that what was moderate drinking then is alcohol misuse now—especially given that he's developed diabetes.
- A daughter does not know that her widowed father misuses alcohol because he drinks only when home alone.

Know About Your Family Member's Medications

Know what prescription and OTC medications your relative takes. The same advice applies to dietary supplements, including vitamins and herbal products. Review the "Check Your Medications for Alcohol Interactions" text box for tips on finding out whether these products have harmful interactions with alcohol.

You may need written or verbal permission from your family member to discuss possible alcohol interactions with his or her healthcare provider or pharmacist.[1429] Even without such permission, you can still inform these healthcare providers of any concerns you have about interactions.

Know How To Connect Your Family Member With Help

See "What Are My Options for Specialized AUD Treatment?" for information on finding treatment facilities and providers in your area. Look at the section "Join a Mutual-Help Group" for tips on finding mutual-help group meetings, if this type of support would be appropriate for your family member.

Know When and How To Talk About Getting Help

Talking constructively with a family member about a drinking problem takes patience. But the payoff may be a greater willingness on his or her part to address the problem. Where you can, connect the conversation to your concerns about your family member's health. Here are some other tips:[1430,1431,1432]

- Don't bring up the topic when your family member is intoxicated.
- Use "I" messages that express your feelings and concern, not "You" messages that criticize or blame the older adult. For example, you can say, "I worry that you'll have another bad fall if you don't cut back on your drinking" instead of "You drink so much that you get falling-down drunk!"
- Don't use guilt, threats, or bribes to try to get your family member to stop drinking.
- Avoid using offensive terms like "an alcoholic" or "an addict" or "a drunk."
- Make positive comments about your family member's strengths and personality.
- Adjust what you say and how much you say at one time to match his or her ability to understand.
- Remind the person how drinking interferes with his or her values, relationships, or favorite activities.
- Offer to drive or arrange transportation for treatment or a mutual-help group.

Participate in Therapy

Participating in therapy with your family member can support his or her treatment. Your relationship with your family member could also benefit because of your participation. See "Family Therapy" and "Behavioral Couples Therapy" in the "Common Types of Therapy" section for brief descriptions of these approaches. You can read more about family therapy in SAMHSA's *Family Therapy Can Help* booklet at https://store.samhsa.gov/product/Family-Therapy-Can-Help-For-People-in-Recovery-From-Mental-Illness-or-Addiction/SMA15-4784.

Don't Enable Drinking

Sometimes **it may seem easier just to pretend that a family member's drinking is not a problem.** But doing so **can be unhealthy for both of you.** Also, if your family member has dementia, don't use alcohol to help him or her sleep or calm down. Doing so is unsafe and can worsen symptoms.

Help Your Family Member Avoid Alcohol Withdrawal

If your family member requires emergency hospitalization for any reason, **tell the hospital staff immediately if he or she misuses alcohol.** Otherwise, he or she may experience alcohol withdrawal, which the medical team could miss or mistake for another condition. The medical team involved in a planned hospitalization for your family member also needs to know in advance if he or she misuses alcohol.[1433] See the "Is Alcohol Withdrawal a Concern?" section for more information.

Take Care of Yourself

Sometimes you have to put yourself first to continue to care for your family member. Accept offers of help and make time to socialize with others. Try to get enough sleep and exercise. Look after yourself by keeping medical appointments and not using alcohol or other substances to cope with stress or other difficult emotions.

WHAT IF I'M OVERWHELMED?

If you are concerned about caregiving's effects on your health or behavior, consider taking the Caregiver Self-Assessment Questionnaire (CSAQ), originally developed and tested by the American Medical Association. This questionnaire is available online (www.healthinaging.org/tools-and-tips/caregiver-self-assessment-questionnaire) without cost in interactive and downloadable versions.

The CSAQ is meant as a guide only. Discuss any concerns you have about your results with your healthcare provider.[1434] Also consider talking with a therapist, especially one with experience with addiction issues.[1435]

Join a Mutual-Help Group

Al-Anon is a mutual-help group for people concerned about or affected by someone with alcohol misuse. If you cannot attend an in-person meeting, look into meetings that take place online or by phone. To learn more, call 1-888-425-2666 (toll-free) or go to the Al-Anon website (https://al-anon.org).

If your family member is in addiction treatment, find out whether the facility or individual provider runs support groups or programs for family members and friends.[1436] Other options are listed in the Resource Alert at the end of this section.

What If My Family Member Won't Discuss Drinking?

Your family member may refuse to discuss his or her drinking habits no matter what you say. Options for next steps include talking to and involving:[1437]

- Your family member's healthcare provider.
- An adult family member.
- A close family friend.
- A clergyperson.
- Your family member's case manager or social worker, if applicable.

It may be easier for your family member to hear about his or her alcohol misuse from someone other than you. Getting another viewpoint may also help your family member see how serious the problem is.

Also consider taking a facility tour, if possible, so that you can better discuss the treatment experience.

RESOURCE ALERT: RESOURCES FOR CAREGIVERS

AARP offers online forums and information resources on caregiving at www.aarp.org/caregiving.

The Alzheimer's Association's locator for its caregiver support groups is available through www.alz.org/help-support/community/support-groups.

The Eldercare Locator, available at https://eldercare.acl.gov/Public/index.aspx or 1-800-677-1116, provides links to state and local agencies on aging and community-based organizations that serve older adults and their caregivers. You can search the site by ZIP Code, city/state, or topic.

The **Family Caregiver Alliance** has an information line for caregivers of adults with chronic medical illnesses living at home (1-800-445-8106), an online Family Care Navigator that provides a state-by-state list of services and assistance for caregivers, and a free website/app called FCA CareJourney that provides information tailored to individual caregivers' specific needs. To learn more, visit www.caregiver.org.

Through the **VA,** family caregivers for veterans have free access to a support line, telephone education groups on caregiving and self-care, a 6-week online workshop on caregiving, and peer recovery support mentoring. To learn more, call the support line at 1-855-260-3274 or visit www.caregiver.va.gov/Care_Caregivers.asp.

Chapter 8 Resources

General

National Institute on Aging (NIA)—Alcohol Use or Abuse (www.nia.nih.gov/health/topics/alcohol-use-or-abuse): This webpage provides tips on talking to a doctor about alcohol and reasons and resources for addressing alcohol use.

NIA—*Older Adults and Alcohol: You Can Get Help* (https://order.nia.nih.gov/sites/default/files/2018-01/older-adults-and-alcohol.pdf): This easy-to-read brochure lays out the issues and answers common questions that older adults have about drinking.

NIAAA—Rethinking Drinking (www.rethinkingdrinking.niaaa.nih.gov): This NIAAA website provides information about what a standard drink is; gives tips on how to refuse drinks and reduce or quit drinking; and offers interactive tools to help address alcohol misuse, such as an alcohol spending calculator. **Note that the information provided is not specific to older adults.**

VA—VetChange (https://mobile.va.gov/app/vetchange): VetChange is an app that, according to the VA, can be used by anyone interested in developing healthier drinking behaviors. Among the app's features are tools for cutting down or quitting drinking and tools for managing stress symptoms. The app is not meant to replace professional treatment.

Alcohol–Medication Interactions

NIAAA—*Harmful Interactions* (www.niaaa.nih.gov/publications/brochures-and-fact-sheets/harmful-interactions-mixing-alcohol-with-medicines): This consumer guide provides information about the dangers of harmful medication–medication interactions and medication–alcohol interactions.

Information on Finding and Accessing Treatment

FindTreatment.gov (https://findtreatment.gov): People seeking treatment for SUDs can use this federal locator maintained by SAMHSA to find treatment facilities based on location, availability of treatment for co-occurring mental disorders, availability of telemedicine care, payment option, age, languages spoken, and access to medication for OUD. The site also links to information on understanding addiction, understanding mental illness, and paying for treatment.

SAMHSA—Behavioral Health Treatment Services Locator (https://findtreatment.samhsa.gov/): This locator is another tool for finding facilities that offer treatment for substance use or mental disorders. The site includes a video tutorial on ways to filter search results by different criteria.

SAMHSA—*Finding Quality Treatment for Substance Use Disorders* (https://store.samhsa.gov/product/PEP18-TREATMENT-LOC): People seeking alcohol treatment can use this factsheet to learn about the necessary steps to complete before accessing a treatment center and the five signs of a quality treatment center.

MedicareInteractive.org—Treatment for Alcoholism and Substance Use Disorder (www.medicareinteractive.org/get-answers/medicare-covered-services/mental-health-services/treatment-for-alcoholism-and-substance-abuse): This webpage discusses Medicare coverage of treatment for SUDs.

NIAAA—Alcohol Treatment Navigator (https://alcoholtreatment.niaaa.nih.gov): This website helps people understand what alcohol use disorder is and how to locate high-quality treatment for it.

Chapter 9—Resources for Treating Substance Use Disorder in Older Adults

Chapter 9 of this Treatment Improvement Protocol (TIP) provides an annotated collection of resources, organized by audience and topic, addressing substance misuse, recovery, and related health and wellness issues among older adults. It is for addiction treatment and mental health service providers, supervisors, and administrators; allied healthcare providers; and older adults and their families, friends, and caregivers. The resources support and expand on the materials contained in each chapter of the TIP.

Adults who have substance use disorders (SUDs) may develop more physical and psychosocial needs as they age. Providers working with adults with SUDs have an increasing need to know where to find the necessary information to coordinate and support these clients' care across major life areas as these clients age. This resource compendium is designed to complement the strategies discussed in other chapters of this TIP. Because SUD is a chronic condition, this compendium contains a selection of validated tools to choose from to help overcome the many challenges with identifying SUD in older clients, intervene, and see older adults through recovery and maintenance.

The selected client-, family-, and caregiver-oriented resources are designed to help readers become better informed about SUDs and other conditions, make decisions about addiction treatment, improve recovery and health, and find support during their recovery or caregiving journey.

Many resources will be of interest across audiences, so readers are encouraged to look at entries throughout Chapter 9.

Provider Note: Use any tools not specifically identified as modified or validated with older adults with caution and only within the scope of your training and practice.

Organization of Chapter 9 of This TIP

Chapter 9 offers comprehensive resources on substance misuse in older adults. It is divided into sections on general resources and resources for supervisors and administrators, for providers, and for clients and families, with a final section on provider tools.

General Resources

Facts, Figures, and General Information

Centers for Disease Control and Prevention (CDC)—Alzheimer's Disease and Healthy Aging Data Portal
www.cdc.gov/aging/agingdata/index.html
Resource summary: This website provides consumers with self-reported data on health indicators in adults over 50. It contains a database of overall health indicators (e.g., ratings of sufficient sleep) and chronic conditions reported by participants in CDC's Behavioral Risk Factor Surveillance System. It also tracks other reported dimensions of health collected by this CDC survey, including cognitive decline, screenings and vaccinations, nutrition, activity level, mental health, and caregiving efforts. This information can be used by healthcare policy stakeholders to gauge the level of health risk behaviors, health conditions, and use of preventive services among the aging population.

The website also provides links to relevant online content and related publications. Instructions are included for using the portal to create custom reports, but the site also allows for creating reports using standard templates that show data by state or U.S. region based on age level, year, and health dimension.

Referral, Treatment, and Support Group Locators

Association of Recovery Community Organizations (ARCO)
https://facesandvoicesofrecovery.org/arco/
Resource summary: ARCO's mission is to grow and sustain the recovery movement, both nationally and internationally, in three main ways. First, ARCO vets nonprofit recovery organizations for acceptance as ARCO affiliates and provides training and technical assistance to further their reach in local communities. Second, ARCO engages in advocacy efforts aimed at the general public and policymakers that involve education against stigma and for acceptance of the recovery community. Third, the organization helps people realize long-term recovery by supporting clients' transitions from treatment to recovery services.

Department of Veterans Affairs (VA)—SUD Program Treatment Locator
www.va.gov/directory/guide/SUD.asp
Resource summary: The VA treatment locator can be searched by state for VA Medical Centers that offer specialized SUD treatment.

Eldercare Locator
https://eldercare.acl.gov
Resource summary: Sponsored by the Administration on Aging (AoA), this website provides information on support services for older adults and caregivers and valuable information on elder rights, housing, health conditions and wellness, insurance benefits, transportation, and long-term care planning. Users can search for information and referrals for assistance through federal, state, and local resources, as well as health insurance counseling agencies. The site is user friendly and offers many options for finding assistance at the community level. Consumers also may request help by phone, online chat, or email. Consumer publications and outreach materials can be ordered for free, but there may be shipping and handling costs.

Faces & Voices of Recovery—Guide to Mutual Aid Resources
https://facesandvoicesofrecovery.org/resources/mutual-aid-resources
Resource summary: Faces & Voices of Recovery offers information on mutual-help organizations based on the following categories: 12-Step, alcohol, co-occurring health conditions, faith-based, family-/friend-focused, gender-specific, medication-assisted, secular, and youth.

FindTreatment.gov
https://findtreatment.gov
Resource summary: People seeking treatment for SUDs can use this federal locator maintained by the Substance Abuse and Mental Health Services Administration (SAMHSA) to find treatment facilities based on location, availability of treatment for co-occurring mental disorders, availability of telemedicine care, payment option, age, languages spoken, and access to medication for OUD. The site also links to information on understanding addiction, understanding mental illness, and paying for treatment.

NIAAA (National Institute on Alcohol Abuse and Alcoholism) Alcohol Treatment Navigator
https://alcoholtreatment.niaaa.nih.gov
Resource summary: This site offers comprehensive information on alcohol use disorder (AUD) and AUD treatment. It describes the need for professional assessment and individualized treatment plans and explains the recovery process, including the possibility of relapse and ways to overcome it. Access is available for clients, family, friends, and clinicians to information sources, mutual-support groups, and resources for older adults who are using alcohol.

Readers can learn about the different types of treatment available, how to find treatment, costs of treatment, insurance coverage, and options for support throughout recovery. The site provides a toolkit that can be downloaded and used by clients, therapists, and treatment providers to "navigate" the process of finding the right kind of help at different stages of recovery and treatment. It includes worksheets that can be individualized to track progress and lists of important questions for clients to ask of providers and treatment programs.

Substance Abuse and Mental Health Services Administration (SAMHSA)—Behavioral Health Treatment Services Locator
https://findtreatment.samhsa.gov
Resource summary: This online resource provides users with a confidential, easy-to-use tool for finding local behavioral health service facilities that offer treatment for substance use and mental disorders. The site includes tutorials for using the interactive tool to search for both inpatient and outpatient programs in a given area.

SAMHSA—*National Directory of Drug and Alcohol Abuse Treatment Facilities, 2020*
https://www.samhsa.gov/data/sites/default/files/reports/rpt23267/National_Directory_SA_facilities.pdf
Resource summary: This document contains a comprehensive list of state-certified substance use and mental disorder treatment facilities that responded to the 2019 National Survey of Substance Abuse Treatment Services (N-SSATS). The directory provides a list of state behavioral health agencies and individual treatment facilities broken out by city and state.

Each facility is coded for primary focus, type of care, treatment setting, treatment approaches, payment and funding assistance options, language services, ancillary services, age groups and genders served, and targeted programs for special populations such as active and retired military; court-ordered clients; trauma victims; and lesbian, gay, bisexual, or transgender (LGBT) individuals.

This directory supplements FindTreatment.gov, which is updated more frequently. The directory, however, contains more detailed information about each facility.

SAMHSA's National Helpline
www.samhsa.gov/find-help/national-helpline
Resource summary: SAMHSA's National Helpline provides free treatment referral and relevant information for individuals who need help dealing with substance misuse or mental illness. The phone lines (1-800-662-HELP [4357]; 1-800-487-4889 [TTY]) are staffed 24 hours a day by information specialists who can respond in English or Spanish. All calls to the helpline are free and confidential.

The helpline website features free publications on substance use and mental disorder awareness, plus family treatment approaches, interventions, and self-help for achieving recovery from these disorders.

Government Agencies and Departments

Administration for Community Living (ACL)
www.acl.gov
Resource summary: ACL, part of the Department of Health and Human Services (HHS), provides funding and support services to community-based organizations that promote independent living and full community participation among older adults and people with disabilities. The website offers information and educational resources about behavioral health and aging issues, chronic disease management, and healthy aging geared toward people with disabilities, older adults, and their family and friends.

National Institute on Aging (NIA)
www.nia.nih.gov
Resource summary: NIA is part of the National Institutes of Health (NIH). Its primary focus is to support a broad scientific effort to understand the nature of aging and the health and wellness of older adults. The website has consumer-oriented information on a wide variety of topics, including caregiving, cognitive health, and doctor–patient communication.

The site also contains training for researchers, clinicians, and students; grants and funding opportunities; clinical practice tools; publications; and health information for the Spanish-speaking community.

Additional Government Resources

CDC—Alzheimer's Disease and Healthy Aging
www.cdc.gov/aging/index.html
Resource summary: This CDC page provides easy access to health information on a number of topics for older adults and resources in advance care planning. It also features updates on the HHS Healthy Brain Initiative; educational materials on aging, depression, and Alzheimer's disease; training and prevention resources; emergency planning tips; data and reports; and other publications.

Centers for Medicare & Medicaid Services (CMS)—Program of All-Inclusive Care for the Elderly (PACE)
www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/PACE/PACE
Resource summary: PACE is a joint Medicare/Medicaid program that provides prepaid, capitated, comprehensive healthcare services to enhance the quality of life and independence of older people in their communities. It is an innovative model that integrates preventive, acute care, and long-term services for a defined subset of frail elderly to manage their often complex medical, functional, and social needs. It promotes the use of flexible, coordinated services and systems that expand the scope of Medicare- and Medicaid-covered services. The webpage links to information for clients, family, caregivers, and healthcare providers on program eligibility and services, as well as the full PACE manual.

Department of Justice—Older Adults, Families, and Caregivers
www.justice.gov/elderjustice/victims-families-caregivers
Resource summary: People concerned about the safety of an older adult can use this page to learn about finding help or reporting abuse. The page also contains important information on the warning signs, impact, and extent of physical, sexual, and mental abuse and financial exploitation of older adults. Consumers can learn how to protect themselves and their family members or friends by reading real stories of abuse and how people took action to stop it.

Health Resources and Services Administration Health Workforce—Geriatrics
https://bhw.hrsa.gov/grants/geriatrics
Resource summary: HRSA developed this webpage specifically for the geriatrics workforce. Users can find training materials and information on grant funding, strategic partnerships, and technical assistance as well as the Geriatrics Workforce Enhancement Program and the Geriatrics Academic Career Award Program, both aimed at improving health care for older adults by integrating geriatrics with health care at individual and institutional levels.

HHS—Aging
www.hhs.gov/aging/index.html
Resource summary: The HHS Aging webpage provides or links to information on healthy aging, age discrimination, elder justice, caregiver resources and long-term care, retirement planning and security, Social Security benefits, Medicare enrollment, and Medicaid coverage.

HIV.gov—Older Adults
www.hiv.gov/topics/olderadults
Resource summary: Readers can access useful resources on HIV and aging; HIV testing sites and care services; and blog posts and articles about HIV that focus on veterans, complications facing older adults with HIV, and technology that helps older adults with HIV and AIDS manage these conditions. The page also contains success stories as well as information on food safety and nutrition, physical activity, and employment.

National Center on Elder Abuse
https://ncea.acl.gov
Resource summary: This site offers free resources for professionals and the public on how to prevent, recognize, report, and stop elder abuse.

National Highway Traffic Safety Administration (NHTSA)—Older Drivers
www.nhtsa.gov/road-safety/older-drivers#topic-medical-conditions
Resource summary: NHTSA offers tips to older drivers and their caregivers on driving safety. The webpage provides indepth information on how to recognize a decline in driver function. Materials are available on topics that include speaking to older adults about alternative transportation methods, modifying driving habits, and adapting vehicles to accommodate special medical issues for safer driving. This webpage can be viewed in English and Spanish.

National Institute of Mental Health (NIMH)—Older Adults and Mental Health
www.nimh.nih.gov/health/topics/older-adults-and-mental-health/index.shtml
Resource summary: This webpage contains or links to information on mental health topics important to older adults, including depression and anxiety disorders. The page connects readers to statistics, brochures and factsheets, sites for help with mental illness, information about clinical trials, and hotlines. Resources are available in English and Spanish.

National Library of Medicine MedlinePlus—Healthy Aging
https://medlineplus.gov/healthyaging.html
Resource summary: The Healthy Aging webpage links to federal and nonfederal information on how to stay healthy and active during older adulthood. It also links to relevant statistics and research. Information on this page can be displayed in English or Spanish.

Nutrition.gov—Older Individuals
www.nutrition.gov/topics/audience/older-individuals
Resource summary: This page, sponsored by the Department of Agriculture, serves as a gateway to reliable information on nutrition and health for older adults. Content is provided by registered dietitians at the Food and Nutrition Information Center and other federal experts. Consumers can learn about other federal resources, such as ChooseMyPlate (formerly MyPlate), the NIA health information page, the Food and Drug Administration (FDA) guide for understanding food labels, and several university webpages explaining osteoporosis and nutrition. They can also find interactive tools for weight management, research and education resources, and help with food assistance programs.

VA—Geriatrics and Extended Care
www.va.gov/GERIATRICS/index.asp
Resource summary: This page provides information on geriatric and extended-care issues; home- and community-based services; residential settings and nursing homes; payment methods for long-term care; and well-being tips for older veterans, their caregivers, and healthcare providers. The page also helps users find health programs for veterans, including smoking and substance use cessation. Consumers can also search topics from A to Z or link to the VA public health page, which provides information on military exposures and related health conditions, health and wellness, research, and statistics.

Groups and Organizations

AARP
www.aarp.org
Resource summary: AARP is a nonprofit organization that works to address the needs and interests of older adults in the United States. The AARP website provides information and resources in English and Spanish on substance misuse, health, and wellness for older adults, among other topics. The AARP Foundation (www.aarp.org/aarp-foundation/find-help/?intcmp=FOU-R2-C2-SRVCS) offers an online local assistance directory that helps older adults with limited resources search for free or reduced-cost services in their area, including healthcare and food programs.

Faces & Voices of Recovery
https://facesandvoicesofrecovery.org
Resource summary: Faces & Voices of Recovery is a recovery advocacy organization promoting science-based addiction treatment and recovery-focused policies that emphasize health and well-being and reduce discrimination against people with addiction. The website contains a library of resources related to recovery advocacy and education, reports, toolkits, and recovery stories, as well as links to recovery research, recovery data, capacity building, training, and ideas for getting involved in your community.

National Association of Area Agencies on Aging
www.n4a.org
Resource summary: This website provides or links to information for consumers and professionals on a variety of older adult–related topics, including health care, housing, transportation, Medicare savings programs, low-income subsidies, health assistance, health insurance, and home- and community-based services. Consumers can access information on aging services, advocacy, initiatives, and resources.

National Association of Social Workers—Aging
www.socialworkers.org/practice/aging
Resource summary: This webpage offers guidance on practice standards and professional growth for social workers who work with older adults. It provides members with access to professional development opportunities, practice and advocacy tools, and other resources to enhance social workers' capacity to support older adults and family caregivers.

National Council on Aging (NCOA)
www.ncoa.org
Resource summary: NCOA promotes the health and economic security of older adults. Its website maintains a collection of resources on healthy aging for providers, older adults, advocates, and caregivers. Topics covered include fall prevention, chronic disease management, and aging mastery.

Cultural Diversity

American Psychological Association (APA)—*Multicultural Competency in Geropsychology*
www.apa.org/pi/aging/programs/pipeline/multicultural-competency.pdf
Resource summary: This report, developed by the APA Committee on Aging, provides recommendations for increasing multicultural competencies among psychologists who work with older adults. The report provides guidelines for improving and maintaining cultural competence in psychological practice and recognizes training modules designed to help providers and organizations develop multicultural standards in geropsychology. It also contains information on key issues facing the multicultural aging population.

APA—Lesbian, Gay, Bisexual and Transgender Aging
www.apa.org/pi/lgbt/resources/aging
Resource summary: This webpage provides information and links to publications, organizations, and media coverage with a focus on LGBT aging issues.

National Asian Pacific Center on Aging (NAPCA)
www.napca.org
Resource summary: NAPCA is dedicated to diversity and advocacy efforts to promote the capacity of employers and mainstream service providers to support Asian Americans and Pacific

Islanders. Website topics for consumers include self-management of chronic diseases, preventing Medicare fraud, healthy eating, brain health, and Medicare Part D enrollment assistance. The website also contains information on dementia, elder abuse prevention, family caregiving, healthy aging, and mature workers.

National Caucus and Center on Black Aging, Inc. (NCBA)
https://ncba-aging.org
Resource summary: NCBA is a national organization focusing on issues affecting minority adults ages 50 and older. Consumers can access on its website information on health and wellness services, employment services, housing services, and other topics.

National Hispanic Council on Aging (NHCOA)
www.nhcoa.org
Resource summary: NHCOA is a national organization concerned with improving the health, economic security, and housing of Hispanic older adults, their families, and their caregivers. The organization's health-related work includes local health education and promotion and cultural competency training for healthcare providers.

National Indian Council on Aging (NICOA)
https://nicoa.org/
Resource summary: NICOA is concerned with improving the health, social services, and economic well-being of American Indian and Alaska Native elders. It is involved with advocacy issues, networking with aging organizations and community service providers, and technical assistance for Native American communities. The website offers information on policy issues, health and wellness for elders, and caregiver support.

National Resource Center on Native American Aging (NRCNAA)
www.nrcnaa.org
Resource summary: Funded by ACL, NRCNAA provides education, training, and technical assistance to help develop community-based solutions to improve the delivery of support services to the Native American aging population. Its aim is to improve their health and social conditions through free projects and services and to empower them to live their best over the lifespan. The site contains educational tools for service providers, caregivers, and community members. Consumers can access factsheets, reports, presentations, and articles on policy activities as well as service locators for aging Native Americans, long-term planning information, programs for balancing health and well-being, and the *Native Aging Visions* newsletter.

SAGE (Advocacy & Services for LGBT Elders)
www.sageusa.org/
Resource summary: The SAGE website provides advocacy, training, programming, and resource development to improve aging for LGBT people nationwide. Older adults and their caregivers can sign up for the SAGE newsletter to get action alerts, event invites, and the latest news on LGBT aging issues. Through its sister sites, the National Resource Center on LGBT Aging and SAGECare, SAGE provides cultural competency training and education for aging services providers.

Understanding Issues Facing LGBT Older Adults
www.lgbtmap.org/file/understanding-issues-facing-lgbt-older-adults.pdf
Resource summary: This report from the Movement Advancement Project and SAGE helps providers and others better understand the social isolation and health challenges that affect many LGBT older adults.

SAMHSA Publications

All publications listed in this section are available at no cost from SAMHSA's publications ordering webpage (https://store.samhsa.gov) or from1-877-SAMHSA-7 (1-877-726-4727).

Family Therapy Can Help: For People in Recovery From Mental Illness or Addiction
https://store.samhsa.gov/product/Family-Therapy-Can-Help-For-People-in-Recovery-From-Mental-Illness-or-Addiction/SMA15-4784
Resource summary: This brochure explores the role of family therapy in recovery from mental illness, SUDs, or both. It explains how family therapy sessions are run and who conducts them. It also provides information on how effective family therapy sessions are in supporting recovery.

Get Connected: Linking Older Adults With Resources on Medication, Alcohol, and Mental Health
https://store.samhsa.gov/product/Get-Connected-Linking-Older-Adults-with-Resources-on-Medication-Alcohol-and-Mental-Health-2019-Edition/SMA03-3824
Resource summary: Developed in collaboration with NCOA, this resource includes a program coordinator's guide and program support materials. The latter are education curriculums for program staff, factsheets and handouts, and forms and resources. This resource is designed for health and aging services providers. The main goal of this resource is to improve the lives of older adults who may be misusing alcohol or medications and who may need the help of mental health services. Content was designed to increase awareness and educate providers about the significant effects of alcohol and medication misuse and mental illness in the older adult population and the steps to take for mitigating problems. The program support materials will help guide providers to adopt effective practices for screening and referral to community-based resources and support services in the areas of substance misuse and mental health.

Medication for the Treatment of Alcohol Use Disorder: A Brief Guide
https://store.samhsa.gov/product/Medication-for-the-Treatment-of-Alcohol-Use-Disorder-A-Brief-Guide/SMA15-4907
Resource summary: This document provides guidance on the use of FDA-approved medications for treating AUD in clinical practice. It includes a section on assessing and treating older adults. The document discusses developing a treatment plan and selecting a medication, initiating treatment with medication, and monitoring patient progress.

Treatment of Depression in Older Adults
https://store.samhsa.gov/product/Treatment-Depression-Older-Adults-Evidence-Based-Practices-EBP-Kit/SMA11-4631
Resource summary: The authors of this guide note that depression is widely underrecognized and undertreated in older adults and offer important tips for working with older adults in terms of communication, privacy, and assessment. This booklet describes how practitioners—such as psychiatrists, psychologists, physicians, nurses, social workers, and aging services providers—can provide effective care for older adults who have depression. It discusses evidence-based approaches for screening and diagnosis, treatment, and outcomes evaluation.

TIP 27: *Comprehensive Case Management for Substance Abuse Treatment*
https://store.samhsa.gov/product/TIP-27-Comprehensive-Case-Management-for-Substance-Abuse-Treatment/SMA15-4215
Resource summary: TIP 27 describes case management as an interdisciplinary approach to addiction treatment that includes coordination of health, substance use, mental health, and social services. This TIP provides guidance and resources to help keep clients engaged in treatment and moving toward recovery, which requires periodically assessing clients and facilitating service delivery across different levels of care, particularly for clients with other disorders and conditions who require multiple services over extended periods of time and who face difficulty in gaining access to those services.

TIP 34: *Brief Interventions and Brief Therapies for Substance Abuse*
https://store.samhsa.gov/product/TIP-34-Brief-Interventions-and-Brief-Therapies-for-Substance-Abuse/SMA12-3952
Resource summary: TIP 34 documents the components of and criteria for the use of brief cognitive–behavioral therapy (CBT), brief strategic and interactional therapies, brief humanistic and existential therapies, brief psychodynamic therapy, short-term family therapy, and time-limited group therapy. Each of these therapies can be used to treat select subpopulations of people with SUDs and those at risk of developing them. These therapies are intended for clients who may not have the time or money to dedicate to traditional therapy or for clients who are functioning in society but who misuse substances. These therapy approaches can be used in a variety of settings and can be useful for reaching a greater number of people than more traditional approaches (e.g., for clients who are on waiting lists for specialized programs). The publication discusses the effectiveness of each approach. It also provides historical background, outcomes research, rationale for use, and case scenarios for implementation of brief interventions and therapies for a range of problems related to substance misuse.

TIP 35: *Enhancing Motivation for Change in Substance Use Disorder Treatment*
https://store.samhsa.gov/product/TIP-35-Enhancing-Motivation-for-Change-in-Substance-Use-Disorder-Treatment/PEP19-02-01-003
Resource summary: This updated TIP describes the elements of motivational interventions, the five principles of motivational interviewing, catalysts for changing behavior, and the stages of change that a client will go through while working toward recovery from substance use. Readers will learn how to integrate motivational approaches into treatment programs, and how to measure client motivation. The TIP provides guidance on how to develop a therapeutic relationship that respects and builds on the client's autonomy, how to tailor treatment to a client's stage of readiness for change, and how to address client resistance or ambivalence by asking open-ended questions and using other motivational strategies. The information in this TIP will help equip clinicians with the necessary skills for enhancing client motivation at different stages of the change process. Content includes a description of proven motivational techniques, research results, case studies, and multiple screening and assessment tools to assist providers in guiding their clients toward positive treatment outcomes.

TIP 54: *Managing Chronic Pain in Adults With or in Recovery From Substance Use Disorders*
https://store.samhsa.gov/product/TIP-54-Managing-Chronic-Pain-in-Adults-With-or-in-Recovery-From-Substance-Use-Disorders/SMA13-4671
Resource summary: TIP 54 discusses the physiological, social, and mental impact of chronic noncancer pain; the cycle of chronic pain and addiction; the importance of ongoing assessment; and the complexity of managing pain in clients with active addiction. This manual is intended for primary care providers, addiction specialists, psychiatrists, pharmacists, and nurses who treat or are likely to treat adult patients with or in recovery from SUDs who present with chronic noncancer pain. It offers guidance on chronic pain management, treating patients in recovery, managing addiction risks in patients treated with opioids, using patient education and treatment agreements and tools for assessing dimension and level of pain, and talking with patients about complementary and alternative treatments.

TIP 57: *Trauma-Informed Care in Behavioral Health Services*
https://store.samhsa.gov/product/TIP-57-Trauma-Informed-Care-in-Behavioral-Health-Services/SMA14-4816
Resource summary: The audience for this guide includes healthcare and behavioral health service providers, prevention specialists, program administrators, community service providers, criminal justice system support workers, and researchers. The TIP covers trauma awareness, the impact of trauma, trauma-informed screening and assessment, implementation of trauma-informed care, and development of a trauma-informed workforce.

TIP 59: *Improving Cultural Competence*
https://store.samhsa.gov/product/TIP-59-Improving-Cultural-Competence/SMA15-4849
Resource summary: TIP 59 provides an introduction to cultural competence in behavioral health services targeted to treatment counselors, clinical and programmatic staff, and program administrators. The guide identifies core competencies necessary for culturally responsive evaluation and treatment planning and discusses the need for cultural competence of support service organizations and behavioral health services for different racial and ethnic groups. The appendixes include cultural resources and clinical tools for screening, assessment, and treatment.

TIP 63: *Medications for Opioid Use Disorder*
https://store.samhsa.gov/product/TIP-63-Medications-for-Opioid-Use-Disorder-Full-Document/PEP20-02-01-006
Resource summary: TIP 63 provides an introduction to the three FDA-approved medications for opioid use disorder (OUD) treatment and explains their use in addressing OUD in medical settings. These medications—methadone, naltrexone, and buprenorphine—have proven effective in rigorous scientific studies for treating OUD, particularly when administered alongside individualized psychosocial supports and other recovery services. The TIP includes practical guidelines and clinical tools for OUD screening, assessment, diagnosis, treatment planning, and referral to recovery support services. It also contains resources for finding medical and behavioral health service providers who specialize in treating OUD.

Resources for Supervisors and Administrators

Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health
https://addiction.surgeongeneral.gov/sites/default/files/surgeon-generals-report.pdf
Resource summary: This report describes the current state of SUD treatment in the United States and offers key recommendations for expansion and further integration of SUD treatment services into medical and behavioral health services so that more people can achieve recovery and reduce the related negative impacts of substance misuse. The report mentions older adult alcohol prevention programs and health considerations for older adults with OUD.

Grantmakers In Aging—*Heartache, Pain, and Hope: Rural Communities, Older People, and the Opioid Crisis*
www.giaging.org/documents/170823_GIA_Rural_Opioid_Paper_FINAL_for_web.pdf
Resource summary: This publication is aimed at funders and policymakers who want to help solve the opioid crisis in rural America. It describes some promising programs that have been implemented at the community level as well as policy recommendations for opioid use treatment and prevention strategies for helping older adults in rural communities. This document also looks at strategies for mitigating risks and outlines several programs that have been funded at the local level, some which have become statewide initiatives.

Institute of Medicine (IOM)—Coordinating Care for Better Mental, Substance-Use, and General Health
www.ncbi.nlm.nih.gov/books/NBK19833
Resource summary: This resource is a chapter from *Improving the Quality of Health Care for Mental and Substance-Use Conditions.* It provides an overview of the provider challenges in coordinating care across services and suggests strategies for enhancing care management and coordination that are applicable to older clients.

For access to the full PDF at no cost, users can create a free account and log in.

IOM—*The Mental Health and Substance Use Workforce for Older Adults: In Whose Hands?*
www.nap.edu/catalog/13400/the-mental-health-and-substance-use-workforce-for-older-adults
Resource summary: This report assesses the behavioral healthcare needs of older adults and makes policy and research recommendations for meeting those needs through a well-trained behavioral health geriatric workforce. Topics include mental illness, SUDs, models of care, and specialized programs.

The IOM Committee on the Mental Health Workforce for Geriatric Populations assessed the mental health and SUD needs of adults ages 65

and older. It learned that older adults face a wide range of negative effects related to issues such as emotional distress, functional disability, decreased quality of life, and increased mortality. The committee used these data to develop workforce recommendations to address these negative effects. Topics include education, training, modes of practice, as well as the financing of public and private programs for older adults in need.

For access to the full PDF at no cost, users can create a free account and log in.

(Note that IOM is now the National Academy of Medicine.)

Office of Minority Health—National Standards for Culturally and Linguistically Appropriate Services (CLAS) in Health and Health Care
https://thinkculturalhealth.hhs.gov/clas
Resource summary: This document describes principles and standards of culturally appropriate treatment services that are applicable to diverse older adults in various health settings, including healthcare and behavioral health programs. The resource is intended for a broad audience that includes hospitals, clinics, community health centers, emergency services, public health stakeholders, and policymakers.

The blueprint for implementing the standards includes a rationale section for enhancing national CLAS standards to ensure the delivery of effective, equitable, and respectful healthcare services and steps for achieving enhanced standards. Other topics include the recruitment, education, and retention of both leadership and a workforce that supports enhanced standards, as well as quality assessment, communication/language competence, and community partnerships. See https://thinkculturalhealth.hhs.gov/clas/blueprint.

NCOA—*Promoting Older Adult Health: Aging Network Partnerships to Address Medication, Alcohol, and Mental Health Problems*
www.ncoa.org/resources/promoting-older-adult-health-aging-network-partnerships-to-address-medication-alcohol-and-mental-health-problems
Resource summary: This publication offers organizations information on linking providers of aging services with addiction and mental disorder treatment. It is dedicated to improving the lives of older adults facing addiction and mental illness by first identifying them and then connecting them to appropriate intervention services.

Contents deal with outreach, education, and prevention; screening, referral, and treatment; and service improvement by means of partnerships and team development. The appendixes list national partner organizations, federal and national agencies that provide resources on substance misuse and mental illness among older adults, and mental health and aging coalitions.

Resources for Providers

General Information

SAMHSA—Addiction Technology Transfer Center (ATTC) Network
https://attcnetwork.org
Resource summary: The ATTC Network is a multidisciplinary resource for professionals in the addiction treatment and recovery services field. The network's 10 U.S-based centers, 2 national focus area centers, and network coordinating office provide access to news, tools and other resources, and free and low-cost training programs in the addiction field. For example, the Mid-America ATTC in 2019 released BHMEDS-R3, the latest version of its app on medications prescribed for SUDs and mental disorders. The app is meant to be a quick reference for nonprescribing behavioral health service professionals and for consumers. See https://attcnetwork.org/centers/mid-america-attc/product/bhmeds-r3-app.

APA Guidelines for Psychological Practice with Older Adults
www.apa.org/pubs/journals/features/older-adults.pdf
Resource summary: This APA resource updates the 2003 *Guidelines for Psychological Practice with Older Adults.* It provides information to psychologists on evaluating their own readiness for working with older adults. It also offers information on clinical issues, assessment, intervention, consultation, professional issues, and continuing education and training related to working with the older adult population.

Council on Social Work Education—Gero-Ed Center
www.cswe.org/Centers-Initiatives/CSWE-Gero-Ed-Center.aspx
Resource summary: This resource, aimed at social work faculty, students, practitioners, and program managers, offers free resources, educational materials, and curriculums to enhance the competencies of social work providers caring for older adults. Webinar topics include patient-centered medical homes, social work in integrated settings, and how to become a certified application counselor to facilitate patient enrollment in the healthcare marketplace.

Users can access educational resources, such as the *Specialized Practice Curricular Guide for Gero Social Work Practice,* information on workforce development projects, and specialized curriculums on age-friendly community initiatives, caregiver well-being, elder justice, rural aging, and LGBT older adults.

NAADAC, The Association for Addiction Professionals—Institute Webinar Series
www.naadac.org/webinars
Resource summary: NAADAC provides free training and low-cost continuing education credits for addiction professionals. Webinars may be viewed live or on demand. Topics include SUD treatment, supervision, workforce development, veterans, families, trauma, and peer recovery support.

NCOA—Resources
www.ncoa.org/audience/professional-resources/?post_type=ncoaresource
Resource summary: This webpage serves as a searchable database of more than 2,000 resources, including articles, webinars, and manuals, for providers who work with aging adults. Topics include fall prevention strategies and the role of self-management in chronic diseases.

Alcohol Misuse and Drug Use

SAMHSA—*A Guide to Preventing Older Adult Alcohol and Psychoactive Medication Misuse/Abuse: Screening and Brief Interventions*
www.ncoa.org/wp-content/uploads/SBIRT-Older-Adult-Manual-Final.pdf
Resource summary: This document is an evidence-based practice manual for guiding behavioral health service providers and administrators in designing, implementing, and delivering screening and brief intervention programs to prevent substance misuse in older adults. It also includes a collection of resources.

American Society of Addiction Medicine (ASAM)
www.asam.org/asam-home-page
Resource summary: The website offers information and education and training resources for medical providers in the field of addiction medicine. The site also offers articles on advocacy issues and addiction news, among other resources. The information presented on the website is free, but training and education courses may require payment.

Drug Interactions Checker
www.drugs.com/drug_interactions.html
Resource summary: This site features an interactive tool for consumers and clinicians that checks for drug interactions with other drugs, including over-the-counter (OTC) medications medications; foods; alcohol and other beverages; herbal products, and some medical conditions.

Readers can search for information on drugs and have access to a searchable pill identifier, FDA alerts, news, and other resources for preventing unexpected consequences from medication use.

National Institute on Drug Abuse (NIDA)—NIDAMED: Clinical Resources
www.drugabuse.gov/nidamed-medical-health-professionals
Resource summary: The NIDAMED website lists resources for healthcare professionals to learn about the effects of substance misuse on clients' health and describes how to identify drug use early and prevent it from turning into misuse or addiction. Resources are tailored to emergency physicians, dentists, pharmacists, family physicians, nurse practitioners, physician assistants, pediatricians, osteopathic physicians, and addiction medicine specialists.

Visitors to the site can access news; education and continuing medical education activities; information for patients, teens, and parents; and a clinician resource and quick reference guide for drug screening.

NIAAA—Professional Education Materials
www.niaaa.nih.gov/publications/clinical-guides-and-manuals
Resource summary: This site is geared toward clinicians, physicians, social workers, and other providers who work with people who misuse alcohol. It offers access to screening, treatment planning, and general information. The site also provides links to related resources on such topics as medications for treating AUD, the impact of alcohol use on families, and epidemiologic data on alcohol use.

NIDA—*Screening for Drug Use in General Medical Settings: Resource Guide*
www.drugabuse.gov/sites/default/files/resource_guide.pdf
Resource summary: This NIDA three-step resource guide describes how providers can use the NIDA Quick Screen and NIDA-modified Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) tools to determine clients' risk of substance misuse. The NIDA Quick Screen can assess clients' past-year drug use and alcohol misuse, and the ASSIST measures lifetime drug use and prescription medication misuse. The resource guide instructs providers on how to score these measures and how to follow up with clients based on their results.

VA—Brief Addiction Monitor
www.mentalhealth.va.gov/communityproviders/docs/bam_continuous_3-10-14.pdf
Resource summary: This questionnaire collects information from patients in recovery on drug and alcohol use, emotional and physical well-being, income needs, and risk activities. This screening tool may be downloaded at no cost.

VA/Department of Defense (DoD) Clinical Practice Guideline: Management of Opioid Therapy for Chronic Pain
www.healthquality.va.gov/guidelines/Pain/cot
Resource summary: This publication, cosponsored by DoD and the VA, provides practitioners with the most current recommendations on prescribing opioid therapy for chronic pain throughout the DoD and VA healthcare systems. The webpage with the link to this publication also contains patient–provider tools for identifying risks associated with opioid use, managing side effects, and tapering and discontinuing opioids.

VA—Opioid Safety Initiative
www.va.gov/PAINMANAGEMENT/Opioid_Safety_Initiative_OSI.asp
Resource summary: The VA Opioid Safety Initiative page features a toolkit for clinical practice. It includes an updated patient education guide, an acute pain provider guide, a quick pain reference guide, as well as medication guidelines, forms, and a treatment manual. Clinical teams caring for older veterans with chronic pain may find this information useful.

The page also provides information on opioid therapy risks, resources on opioids for veterans and providers, and access to the National Library of Medicine Opiate Addiction Portal and Opioid Safety Initiative materials.

World Health Organization (WHO)—The ASSIST Screening Test Version 3.0 and Feedback Card
www.who.int/substance_abuse/activities/assist_test/en/
Resource summary: This validated interview tool is used to screen clients for all types of substance misuse. A computer version and a shorter version (ASSIST-Lite) are available. The full version of WHO's ASSIST screener, scoring system, and client feedback guidance can be downloaded and is available in multiple languages.

Dementia and Other Cognitive Disorders

Alzheimer's Association—2018 Dementia Care Practice Recommendations
www.alz.org/professionals/professional-providers/dementia_care_practice_recommendations
Resource summary: These recommendations provide guidance to healthcare and social service providers who work with individuals living with dementia and their families in residential and community-based care settings. They aim to inform and influence dementia care standards, training, practice, and policy.

The document contains review articles on the fundamentals of person-centered care for individuals with dementia, person-centered assessment and care planning, evidence-based nonpharmacological practices to address

behavioral and psychological symptoms of dementia, and evidence-based interventions for transitions in care for individuals living with dementia. The guide also discusses supportive and therapeutic environments for people living with dementia, practice principles for quality dementia care, progressive support activities of daily living for people living with dementia, ongoing medical management of dementia, and information on meeting the informational, educational, and psychosocial support needs of people living with dementia and their caregivers.

Association for Frontotemporal Degeneration—For Health Professionals
www.theaftd.org/for-health-professionals
Resource summary: This webpage provides educational resources for healthcare professionals about frontotemporal degeneration (FTD), including clinical presentations of the various subtypes of FTD, approaches for diagnosing FTD, and methods for treating symptoms of FTD. It also links to support resources for those living with FTD and their families, and to research and clinical trials.

NIA—Alzheimer's and Dementia Resources for Professionals
https://www.nia.nih.gov/health/alzheimers-dementia-resources-for-professionals
Resource summary: This NIA webpage offers free clinical practice tools for diagnosis, treatment, and management; training materials and professional curriculums; articles on patient care; and other resources on cognitive impairment for medical and behavioral health service providers who see older adults.

The site also contains a section for caregivers and patients as well as links to e-alerts, news, funding announcements, and options for ordering free publications.

Cognitive Screeners

Alzheimer's Association—*Cognitive Assessment Toolkit*
www.alz.org/getmedia/9687d51e-641a-43a1-a96b-b29eb00e72bb/cognitive-assessment-toolkit
Resource summary: Developed by the Alzheimer's Association, this toolkit is a collection of validated measures, including the Mini-Cog©, the Memory Impairment Screen, and the General Practitioner Assessment of Cognition, the short form of the Informant Questionnaire on Cognitive Decline in the Elderly, and the Eight-Item Informant Interview to Differentiate Aging and Dementia. The toolkit also contains a journal article on the association's recommendations for assessing cognitive impairment during the Medicare Annual Wellness Visit using structured assessment tools.

Mini-Cog©
https://mini-cog.com/
Resource summary: This website provides guidance on how to administer this free-to-clinicians tool for screening for cognitive impairment in older adults. It contains details on how permissions (if required) may be obtained for use and provides downloadable PDFs for clinical use. The Mini-Cog© is available in English, Chinese, Arabic, Spanish, Portuguese, and Malay.

Counseling Approaches

A Clinician's Guide to CBT With Older People
www.uea.ac.uk/documents/246046/11919343/CBT_BOOKLET_FINAL_FEB2016%287%29.pdf/280459ae-a1b8-4c31-a1b3-173c524330c9
Resource summary: This workbook explores age-sensitive strategies for adapting CBT for older adults. It includes an overview of fundamentals required for increasing treatment access for older people, the problems of depression and anxiety in later life, age-appropriate augmentations to CBT, working with complex comorbidity issues, and the challenges of ageism in general and in the treatment field itself. The workbook contains practical exercises and case studies illustrating how to use CBT to help older people reduce their symptoms of concern.

Dialectical Behavior Therapy (DBT) Research and Training
http://depts.washington.edu/uwbrtc/research/treatment-development-clinic/
Resource summary: This webpage, for the Behavioral Research & Therapy Clinics (BRTC) at the University of Washington, explains that DBT incorporates mindfulness practices to help

people manage overwhelming emotions. It is a skill-building approach that shows promise in treating older adults who experience emotional dysregulation and have poor interpersonal skills.

The page provides links to research and training areas, BRTC research, the treatment development clinic, publications, and a subscription area for receiving related news.

Dulwich Centre—A Gateway to Narrative Therapy and Community Work
https://dulwichcentre.com.au
Resource summary: This site provides information and educational resources on narrative therapy, a link to collective projects, and access to the subscriber page of the *International Journal of Narrative Therapy and Community Work*.

Motivational Interviewing Network of Trainers (MINT)
https://motivationalinterviewing.org
Resource summary: The MINT website provides users with information about the network, how to join, and a library of MI publications. The site includes references, articles, videos, and links to training opportunities in the theory and practice of MI. Users can search the site for trainings and events, information about MI, MI in the news, news about MINT, MI research, and other resources.

NIAAA—*Twelve Step Facilitation (TSF) Therapy Manual*
https://pubs.niaaa.nih.gov/publications/projectmatch/match01.pdf
Resource summary: The TSF manual provides step-by-step instruction on using TSF for treating alcohol misuse. Its practical rules are applicable across a variety of outpatient treatment settings and it is flexible enough to allow for individual treatment interventions that are consistent with the 12 Steps of Alcoholics Anonymous.

Anxiety and Depression

SAMHSA—*Older Americans Behavioral Health: Issue Brief 6, Depression and Anxiety: Screening and Intervention*
https://acl.gov/sites/default/files/programs/2016-11/Issue%20Brief%206%20Depression%20and%20Anxiety.pdf
Resource summary: This document, published by SAMHSA and AoA, provides an overview of depression and anxiety in older adults, links to screening and assessment tools, and recommendations for treatment by healthcare and social service organizations. It provides links to several depression and anxiety measures, including the Geriatric Depression Scale (GDS) and the nine-item Patient Health Questionnaire (PHQ-9). The authors discuss several evidence-based treatment programs, such as PEARLS (Program to Encourage Active, Rewarding Lives for Seniors) and the Healthy IDEAS (Identifying Depression & Empowering Activities for Seniors) model of community-based depression care management.

The document also includes recommendations for aging services providers, behavioral health service providers, and healthcare providers on treatment options and financing.

SAMHSA—*Treatment of Depression in Older Adults, Evidence-Based Practices Kit*
https://store.samhsa.gov/product/Treatment-Depression-Older-Adults-Evidence-Based-Practices-EBP-Kit/SMA11-4631
Resource summary: SAMHSA offers this toolkit, which provides indepth information for family, caregivers, providers, and administrators on treatment of depression in older adults. Information includes evidence-based guidelines for screening, treating, and assessing depression in older adults, along with planning, implementation, and maintenance ideas. This free kit is available as downloadable PDFs.

Anxiety and Depression Association of America (ADAA)
https://adaa.org
Resource summary: ADAA promotes awareness of anxiety disorders and depression and supports scientific innovation in treatment. The website contains information and links to education, treatment, resources, and support for the public and for treatment providers. Consumers can find therapists and support groups, blog posts, the ADAA newsletter, news, and tips for managing symptoms. The site also provides access to a free online support group.

Posttraumatic Stress Disorder (PTSD) and Trauma

SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach
https://store.samhsa.gov/product/SMA14-4884
Resource summary: The purpose of this publication is to provide a working concept of trauma and key principles of a trauma-informed treatment approach that can be used not only by the behavioral health service sector, but by an array of service systems. The paper also provides suggested guidance for implementing a trauma-informed approach.

National Center for PTSD—For Providers
www.ptsd.va.gov/professional/index.asp
Resource summary: This VA webpage offers training materials, information, and tools to help with assessing and treating trauma-related disorders. It contains links to continuing education on PTSD assessment approaches and measures, essential treatments and treatment approaches for specific populations (including older adults), and a consultation program for VA and non-VA providers serving veterans.

Short Post-Traumatic Stress Disorder Rating Interview (SPRINT) Self-Report Screen
www.ptsd.va.gov/professional/assessment/screens/sprint.asp
Resource summary: SPRINT is a valid, reliable measure for asking about different PTSD symptoms. Visit the webpage to learn how to get copies of SPRINT.

SPAN Self-Report Screen
www.ptsd.va.gov/professional/assessment/screens/span.asp
Resource summary: SPAN is named for the trauma symptoms it measures (Startle, Physically upset by reminders, Anger, and Numbness). Respondents rate four items on a five-point scale. Visit the webpage for information on how to get copies of SPAN.

Trauma Screening Questionnaire (TSQ)
www.ptsd.va.gov/professional/assessment/screens/tsq.asp
Resource summary: The TSQ is a brief 10-item self-report screening measure designed for use with survivors of all types of traumatic stress. For sample items and information on how to get copies of the TSQ, see the webpage provided.

Tobacco Use

CDC—Smoking & Tobacco Use
www.cdc.gov/tobacco
Resource summary: This webpage provides free resources and information for clients and clinicians for reducing cigarette smoking, tobacco dependence, and related consequences of tobacco use. The site also offers tools and resources; data and statistics; multimedia options; state and community resources; stories and tips from former smokers; and information on global tobacco control activities, tobacco-related disparities, and special populations.

HHS—Million Hearts® Initiative: Tobacco Use
https://millionhearts.hhs.gov/tools-protocols/tools/tobacco-use.html
Resource summary: Providers can use the tools on this webpage to improve the tobacco use interventions they undertake as part of clinical care.

National Cancer Institute (NCI)—Smokefree.gov
https://smokefree.gov
Resource summary: Smokefree.gov explains the journey from wanting to quit to taking action and offers free support to help clients quit tobacco. The site provides tips for how to cope with stress without smoking, steps for preparing to quit, and ideas for managing cravings. It discusses withdrawal symptoms, triggers, and the health benefits of quitting and offers a variety of ways for smokers to reach their goals, including the use of nicotine replacement therapy, smoke-free apps, social media support, and smoke-free texting programs. The site offers links to other Smokefree.gov pages specific to the needs of women, veterans, teens, Spanish speakers, and people over 60.

Health and Wellness

SAMHSA—Treating Sleep Problems of People in Recovery From Substance Use Disorders: *In Brief*
https://store.samhsa.gov/product/Treating-Sleep-Problems-of-People-in-Recovery-From-Substance-Use-Disorders/sma14-4859
Resource summary: This publication offers tips for healthcare providers on how to help clients in recovery from SUDs who have sleep problems. It discusses the potential impact of poor sleep on recovery and offers recommendations on screening and treatment.

American Geriatrics Society—Complementary and Integrative Medicine
(https://geriatricscareonline.org/FullText/B030/B030_VOL001_PART001_SEC002_CH012)
Resource summary: This webpage offers a useful summary of complementary and integrative medicine approaches. The page also includes a table listing natural products and their interactions with prescribed medications, as well as a summary of the evidence base for complementary and integrative medicine approaches as they relate to different health conditions common in aging.

CDC—Timed Up & Go (TUG) Test
www.cdc.gov/steadi/pdf/TUG_Test-print.pdf
Resource summary: The TUG test is part of the Stopping Elderly Accidents, Deaths, and Injuries (STEADI) Program from CDC. The test assesses a client's ability to stand from a sitting position, walk a short distance (10 feet), turn around, and walk back to where he or she was sitting. Several parameters are measured during the exercise, such as gait, arm swinging, shuffling, posture, stride, and time to completion of the task. Results are used to gauge the person's risk for falling or to indicate a possible need for further clinical evaluation.

CMS—*Annual Wellness Visit*
www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/AWV_chart_ICN905706.pdf
Resource summary: This document is targeted to Medicare fee-for-service providers to help them provide covered services to their patients during annual wellness visits. It can be printed out in hard copy but also contains links to resources such as the CMS Initial Preventive Physical Examination sheet, CDC's health risk assessment framework, Medicare's coverage of SUD treatment services, and Medicare's claims processing manual, which contains coding for rural health clinics and federally qualified health centers.

NCOA—Center for Healthy Aging
www.ncoa.org/center-for-healthy-aging
Resource summary: The Center for Healthy Aging collaborates with national, state, and community partners to improve the lives of aging adults. It supports expansion and sustainability efforts aimed at health promotion and disease prevention among this population. It provides educational resources on health and wellness, disease management, nutrition, exercise, and fall prevention for older adults.

The center houses the National Chronic Disease Self-Management Education Resource Center and the National Falls Prevention Resource Center, both funded by ACL. These resources are for clinicians and consumers.

NCOA—Engaging American Indian/Alaska Native Elders in Falls Prevention Programs
www.ncoa.org/resources/engaging-american-indianalaska-native-elders-falls-prevention-programs
Resource summary: This NCOA webpage has a link to a tip sheet with culturally sensitive, practical strategies for engaging American Indian and Alaska Native elders in fall prevention efforts. Users can download a tip sheet that discusses the issue of falls among the elderly and related impacts, risk factors, the needs of aging tribal members, intervention approaches that leverage existing resources, and ways to ensure a culturally competent workforce.

NIA—Health Information
www.nia.nih.gov/health
Resource summary: This page of the NIA site offers easy-to-read information on a broad range of health topics specific to older adults, including healthy eating, exercise, and fall prevention. Users can search for such topics as Alzheimer's disease, caregiving, cognitive health, physical activity, healthy eating, doctor–patient communication, menopause, hyperthermia, shingles, heart health,

depression, Lewy-body dementia, and advance care planning. They can also order print publications, find opportunities to participate in clinical trials, and contact NIA for more specific information.

Self-Management Resource Center
www.selfmanagementresource.com
Resource summary: The center makes available a variety of small-group self-management programs for chronic illness. The programs are available online or through licensed local organizations. In addition to the core program for groups with multiple chronic illnesses, several condition-focused programs are offered, including ones for diabetes, chronic pain, and HIV. These programs were originally developed by and housed at the Stanford Patient Education Research Center. The site provides information about provider training as well as licensing for organizations that would like to offer one or more of the self-management programs. The site also provides access to implementation tools, trainer certification guidelines, administrative manuals in English and Spanish, and facilitator videos, and it links to a locator for finding local programs.

Resources for Clients and Families

General

NCOA
www.ncoa.org
Resource summary: NCOA promotes the health and economic security of older adults. Its website maintains a collection of resources on healthy aging for providers, older adults, advocates, and caregivers, including news on related topics of interest; innovations in the field; and information on economic security, healthy living, and public policy affecting older adults. The site also provides links to interactive tools for determining benefits, getting financial tips, and finding the best Medicare plan.

NCOA—Resources
www.ncoa.org/audience/older-adults-caregivers-resources/?post_type=ncoaresource
Resource summary: This webpage contains a searchable database of articles and webinars on topics ranging from behavioral health issues to fall prevention.

Alcohol Misuse and Drug Use

SAMHSA—*Finding Quality Treatment for Substance Use Disorders*
https://store.samhsa.gov/product/Finding-Quality-Treatment-for-Substance-Use-Disorders/PEP18-TREATMENT-LOC
Resource summary: This one-page downloadable factsheet provides useful guidelines for finding a quality SUD treatment provider. It identifies steps for accessing care and the five signs of quality treatment: program and staff accreditation, availability of FDA-approved medications, use of evidence-based practices, promotion of family involvement, and provision of ongoing support (e.g., ongoing counseling, help with meeting basic needs like sober housing).

A.A. for the Older Alcoholic—Never Too Late
www.aa.org/assets/en_US/p-22_AAfortheOlderAA.pdf
Resource summary: This booklet presents stories from men and women who became involved with AA as older adults. It recreates the narrative approach of AA speakers at meetings in a large-print format. The stories briefly describe the individuals and the transformation to sobriety that they achieved through attending AA meetings.

How Do You Talk to Older Adults Who May Be Addicted?
www.hazeldenbettyford.org/articles/how-to-talk-to-an-older-person-who-has-a-problem-with-alcohol-or-medications
Resource summary: This easy-to-read online article can be used by family members and others concerned about an older adult's use of alcohol or drugs. It offers information about how to identify signs that an older adult may be misusing alcohol or drugs, how to talk with the older person nonconfrontationally, and how to get help. The article presents practical approaches and specific language for talking with older adults in the case of risky alcohol or medication use.

Interactive Alcohol Misuse Screener
www.alcoholscreening.org
Resource summary: AlcoholScreening.org is a free service of the Center on Addiction. The screening tool is designed to help people determine whether their alcohol use is harmful to their health or if it

increases their risk for future harm. Depending on the results of the screener, the site offers guidance on lowering a person's risks of harm from drinking and urges those with hazardous drinking patterns to take positive action. Note that the site's discussion of drinking in moderation is not specific to older adults.

MedicareInteractive.org—Treatment for Alcoholism and Substance Use Disorder
www.medicareinteractive.org/get-answers/medicare-covered-services/mental-health-services/treatment-for-alcoholism-and-substance-abuse
Resource summary: This webpage discusses Medicare coverage of treatment for SUDs.

NIAAA Alcohol Treatment Navigator
https://alcoholtreatment.niaaa.nih.gov
Resource summary: This website helps consumers understand AUD and take steps for finding the best treatment options based on individual needs and preferences. It explains the different types of treatment available, associated costs, and ways to identify quality treatment.

The site offers a downloadable toolkit to help users organize and simplify their search process.

NIAAA—Rethinking Drinking: Alcohol & Your Health
www.rethinkingdrinking.niaaa.nih.gov
Resource summary: This interactive website from NIAAA provides consumers with accurate information about what a standard drink is and how to calculate their level of alcohol consumption based on the types and quantity of alcoholic beverages they consume. See the Drink Size Calculator (www.rethinkingdrinking.niaaa.nih.gov/Tools/Calculators/Drink-Size-Calculator.aspx) and the Cocktail Content Calculator (www.rethinkingdrinking.niaaa.nih.gov/Tools/Calculators/Cocktail-Calculator.aspx). **Note that guidelines at this website are for *all adults;* they are not specific to older adults.** Users can download publications in English- or Spanish-language versions.

NIA—Alcohol Use or Abuse
www.nia.nih.gov/health/topics/alcohol-use-or-abuse
Resource summary: This webpage provides readers with tips on discussing sensitive topics with their healthcare providers, including alcohol use. It also provides information on how to help someone who misuses alcohol, recognize when drinking has become a problem, and understand the relationship between alcohol and drug use. Consumers can find facts about aging and alcohol, such as how alcohol may affect older people differently than younger people, and how heavy drinking can cause health problems, make some health problems worse, and affect safety in general.

NIA—*Older Adults and Alcohol: You Can Get Help*
https://order.nia.nih.gov/sites/default/files/2018-01/older-adults-and-alcohol.pdf
Resource summary: This publication is for older adults and their family members, friends, and caregivers. It provides free, easy-to-read information and answers to common questions about how alcohol affects the body as people age and how to get help if drinking is negatively affecting health. The document explains how the aging body becomes more sensitive to the effects of alcohol and how heavy drinking can make some health problems worse. It also discusses the harmful effects of drinking alcohol while taking medicines, as well as the benefits of social supports for cutting down or quitting drinking.

Alcohol and Medication Interactions

Drugs.com—Drug Interactions Checker
www.drugs.com/drug_interactions.html
Resource summary: Consumers can access information that explains what drug–drug interactions are, how they occur, how to check for them, and what other factors can cause interactions with certain medications. Consumers can also check medication–alcohol interactions and download the website's mobile app for information on the go. The app is compatible with Android and iOS devices.

FDA—My Medicine Record
www.fda.gov/downloads/AboutFDA/ReportsManualsForms/Forms/UCM095018.pdf
Resource summary: My Medicine Record is a form that clients can use to keep track of all of their medications and record any adverse reactions that occur. It includes sections for recording emergency contact information, primary care physician,

and pharmacy. The form also provides a list of questions to ask providers about medications and dietary supplements. Clients can enter information electronically or print the form and write on it.

NIAAA—*Harmful Interactions: Mixing Alcohol With Medicines*
https://pubs.niaaa.nih.gov/publications/Medicine/Harmful_Interactions.pdf
Resource summary: This 10-page pamphlet discusses commonly used prescription and OTC medications and how they interact with alcohol. After giving a brief explanation of the dangers involved, such as reduced effectiveness of the medication or toxicity, the document displays a multipage table that contains a list of commonly used medications, by brand names and generic names, and identifies the reactions that might occur when drinking alcohol and taking a given medication.

Tobacco Use

NIA—Quitting Smoking for Older Adults
www.nia.nih.gov/health/quitting-smoking-older-adults
Resource summary: This webpage provides free information to help older adults quit smoking. It contains a list of federal resources and their associated quit lines and discusses the dangers of traditional cigarettes, cigars, pipes, hookahs, chewing tobacco, snuff, and secondhand smoke, and the benefits of quitting at any age. Some of the dangers are increased risks for lung disease, heart disease, cancer, respiratory disease, osteoporosis, eye disease, and diabetes.

NCI—*Clear Horizons: A Quit-Smoking Guide for People 50 and Older*
https://smokefree.gov/sites/default/files/pdf/clear-horizons-accessible.pdf
Resource summary: *Clear Horizons* serves as both a self-help guide for older smokers who want to quit and an addiction counseling protocol for clinicians who work with this population. The document contains information on the health benefits of quitting smoking, step-by-step guidance for preparing to quit, and tips for remaining smoke free. Content addresses the issues of individual triggers, craving, withdrawal, and "slips." The guide says that slipping back into the smoking habit is common but emphasizes that this does not indicate failure. The guide recommends getting back on track after a slip by following the 4 D's: Distract yourself, Deep breathing, Drink water, and Do something else. Information about quit-smoking medication, consumer resources, and a sample quit journal can also be found in the guide.

Mutual-Help Groups

Al-Anon
https://al-anon.org/
Resource summary: Al-Anon family group meetings allow friends and family members of people who misuse substances to share their experiences and learn how to apply the principles of the Al-Anon program to their individual situations. Sponsorship gives members the chance to receive personal support from more experienced individuals in the program. Many Al-Anon members benefit by hearing about situations and relationships that are similar to their own.

Al-Anon literature is available in more than 40 languages. The Al-Anon/Alateen Service Manual is available in Spanish and French, and the Al-Anon website is available in English, Spanish, and French.

Alcoholics Anonymous (AA)
https://aa.org/
Resource summary: The AA website offers information about alcohol misuse and links to local resources that provide lists of AA group meetings for people who misuse alcohol and want to stop. AA sponsors provide members with more personal support from experienced individuals.

Information is provided for clinicians, AA members, and the general public. Local resources can be obtained by entering in your ZIP Code. The site showcases a number of public service announcements (available in English, Spanish, and French), as well as AA literature, e-books, self-support resources, the press page, General Service Board, General Service Office newsletters, regional forums information, and international AA activities.

Narcotics Anonymous (NA)
www.na.org
Resource summary: NA is a global community-based organization with a multilingual, multicultural membership that supports addiction recovery via a 12-Step program, including regular group meeting attendance. It is an ongoing support network for maintaining a drug-free lifestyle.

The website features information for the public, literature and other products, a link to events, resources and updates for NA members, and an interactive database to search for local helplines and meetings.

Secular Organizations for Sobriety (SOS)
www.sossobriety.org
Resource summary: SOS is a network of support groups focused on helping people achieve sobriety from SUDs or compulsive eating using meeting support in a secular setting. Consumers who want to find a meeting must send a message and provide their name, phone number, and email address.

Seniors In Sobriety (SIS)
www.seniorsinsobriety.com
Resource summary: SIS is an offshoot of AA and has been actively reaching out to older adults with AUD since 1990. Its outreach efforts include encouraging local meetings to designate themselves as senior friendly and starting SIS meetings.

This website provides information about SIS's history, focus, and annual conference. It also has a list of meetings where older adults who misuse alcohol can meet for fellowship, help with cutting down or quitting alcohol consumption, and education on the unique problems alcohol misuse causes their age group.

SMART (Self-Management and Recovery Training) Recovery
www.smartrecovery.org
Resource summary: The SMART Recovery website provides information about its program, training opportunities, and a searchable database of local and online meetings in the United States and abroad. The SMART Recovery program supports people who are trying to break free from addictive activities of all kinds. It provides education and tools to help clients change their behaviors and thinking. The site's SMART Recovery Toolbox includes quick reference worksheets, homework exercises, and literature resources that focus on confidence building, coping with anxiety, decision making, and relapse prevention.

Women for Sobriety (WFS)
https://womenforsobriety.org
Resource summary: WFS is a recovery program based on women's unique emotional needs that focuses on helping women with SUDs enter into and maintain recovery. The WFS New Life Program is based on 13 Acceptance Statements that encourage emotional and spiritual growth. WFS has certified moderators and chat leaders facilitating mutual-help groups online and in person, as well as phone volunteers available for one-on-one support.

Consumers have access to information on the program, an interactive meeting finder, online and phone support, the annual conference, a signup page for the email list, and articles.

Caregiver Resources

Alzheimer's Association—Support Groups
www.alz.org/care/alzheimers-dementia-support-groups.asp
Resource summary: This webpage describes group meetings that provide a safe place for caregivers, family, and friends of people with dementia to meet and develop a mutual support system. The page provides a 24/7 helpline and a searchable database of caregiver support groups.

Caregiver Self Assessment Questionnaire
www.healthinaging.org/tools-and-tips/caregiver-self-assessment-questionnaire
Resource summary: Originally developed and tested by the American Medical Association, this questionnaire is hosted on the HealthinAging.org website and is available in multiple languages. The questionnaire is available as an interactive online assessment tool or can be downloaded as a PDF. Questions are related to physical, emotional, and mental conditions.

ElderLaw Answers
www.elderlawanswers.com
Resource summary: ElderLaw Answers provides free tools and indepth information for consumers and elder law attorneys. The website maintains resources on financial and legal services related to caring for an older adult with healthcare and other needs. Consumers can search for information on estate planning, Medicaid, probate matters, long-term care insurance, nursing homes and other support care options, senior living, retirement planning, and veterans' benefits, as well as answers to common questions and statistics on related issues.

Family Caregiver Alliance (FCA)
www.caregiver.org
Resource summary: FCA works to address the needs of caregivers for family members. The site has information on complex caregiver challenges and provides education resources on chronic illnesses, a research registry, and advocacy tools. It also offers an information line for caregivers of adults with chronic medical illnesses living at home, online caregiver support groups, and an online Family Care Navigator that provides a state-by-state list of services and assistance for caregivers.

mmLearn.org
https://training.mmlearn.org/video-library
Resource summary: mmLearn.org maintains a library of free videos for caregivers who seek practical ways to meet the physical, emotional, and spiritual needs of the older adults in their care. Videos are available on specific topics, including substance misuse, Alzheimer's disease, assistive devices, wound care, depression, and fall prevention. This resource also offers free continuing education for practitioners.

National Caregivers Library
www.caregiverslibrary.org
Resource summary: This website contains an extensive online library for caregivers that includes useful articles, forms, checklists, and links to topic-specific external resources. It offers free resources specific to caregiving activities and support, self-care for the caregiver, employer support, nutrition, safety, disaster preparedness, elder abuse, and caregiving ministries. Topics discussed include disabilities, diseases, emotional issues, end-of-life issues, government resources, legal and money matters, and transportation. Users can find details on advanced directives, consumer protection, senior care options, and new research.

VA—Caregiver Support
www.caregiver.va.gov/Care_Caregivers.asp
Resource summary: The VA offers a number of free services to support family caregivers of veterans, including the online workshop Building Better Caregivers, which gives caregivers information and tools to help them learn more effective caregiving strategies, as well as ways to manage their own stress and emotions. The webpage also offers links to many other caregiver resources, such as the VA's Caregiver Support Line—an information and referral center staffed by licensed healthcare professionals; the Caregiver Support Website; the VA's Peer Support Mentoring Program; a telephone-based coaching program for caregivers; a suicide prevention toolkit for caregivers; and a secure video-based tool that allows veterans and their caregivers to meet with VA healthcare providers through a computer or mobile phone application. In addition, caregivers can obtain help from the local VA Medical Center's Caregiver Support Coordinator, a licensed professional who can provide valuable information and match caregivers with services for which they are eligible.

The website provides or links to tips and tools on managing medicines, talking with providers, caring for oneself, staying organized, and other topics. It also has links to a hospital locator, health programs for veterans, long-term and community-based care, A–Z health topics, the National Center for PTSD, and the National Resource Directory.

Health and Wellness

ACL—*Expand Your Circles: Prevent Isolation and Loneliness As You Age*
https://eldercare.acl.gov/Public/Resources/Brochures/docs/Expanding-Circles.pdf
Resource summary: This easy-to-read brochure offers tips for older adults on how to expand their social networks and remain socially engaged with others. It provides statistics related to social

isolation among older adults; lists negative health effects associated with isolation and loneliness; and links to resources for connecting with other people.

NIA—A Good Night's Sleep
www.nia.nih.gov/health/good-nights-sleep
Resource summary: This NIA webpage focuses on the importance of a good night's sleep. It discusses sleep apnea, movement disorders in sleep, and the effects of Alzheimer's disease on sleep patterns, and tips for falling asleep safely. It also provides access to outside resources and articles on related topics, such as fatigue in older adults, sleep problems and menopause, and ways to manage sleep problems for older adults with Alzheimer's disease.

NIMH—*Older Adults and Depression*
www.nimh.nih.gov/health/publications/older-adults-and-depression/19-mh-8080-olderadultsanddepression_153371.pdf
Resource summary: This NIMH brochure discusses depression among older adults. The publication describes the most common types of depression, depression signs and risk factors, treatment options, and steps to take in addition to treatment. It also offers tips on how to help someone with depression and tells the reader what to do if he or she is having suicidal thoughts.

Silver Sneakers—Health Fitness for Older Adults
www.silversneakers.com
Resource summary: Silver Sneakers is a flexible health and fitness program for adults ages 65 and older. It is covered under some Medicare Advantage Plans. Classes are held in a variety of settings, such as gyms and community centers. Consumers can search the website for locations across the United States.

Silver Sneakers fitness programs offer beginner- and experienced-level classes. Consumers can browse the different classes offered on the website, including cardio fitness lessons, low-impact water activities, and balance training. If unable to attend classes in person, Silver Sneakers members can access online exercise videos on the website or use an online app to tailor their exercise program and track healthy living goals.

The website also has links to articles and information about healthy living for seniors, including tips on preparing meals, beating the winter blues, volunteering, and maintaining interests.

Technology and Social Media

Lifeline Support
www.lifelinesupport.org
Resource summary: This federal program lowers the monthly cost of phone and Internet service for eligible customers who use a participating phone or Internet provider. The website explains eligibility requirements and the application process, and includes a locator for participating companies.

Staying Connected: Technology Options for Older Adults
https://eldercare.acl.gov/Public/Resources/Brochures/docs/N4A_Tech_Brochure_P06_high.pdf
Resource summary: This brochure introduces older adults to types of social media options and their benefits. It contains information on text messaging, Internet, email, Facebook, Skype, YouTube, instant messaging, Twitter, blogging, cell phones, and other technologies used to receive information and communicate with family and friends. The brochure briefly explains how and when to use social media, and gives privacy and etiquette tips.

Dementia and Other Cognitive Disorders

Alzheimer's Association—Resources
www.alz.org/help-support/resources
Resource summary: This webpage has caregiver training resources in English and Spanish; a virtual library of publications, databases, and social media tools; information for children and teens; tips for handling holidays and resolving family conflicts surrounding the disease; and other resources. Users can link to their local Alzheimer's Association chapter, community resources, and message boards.

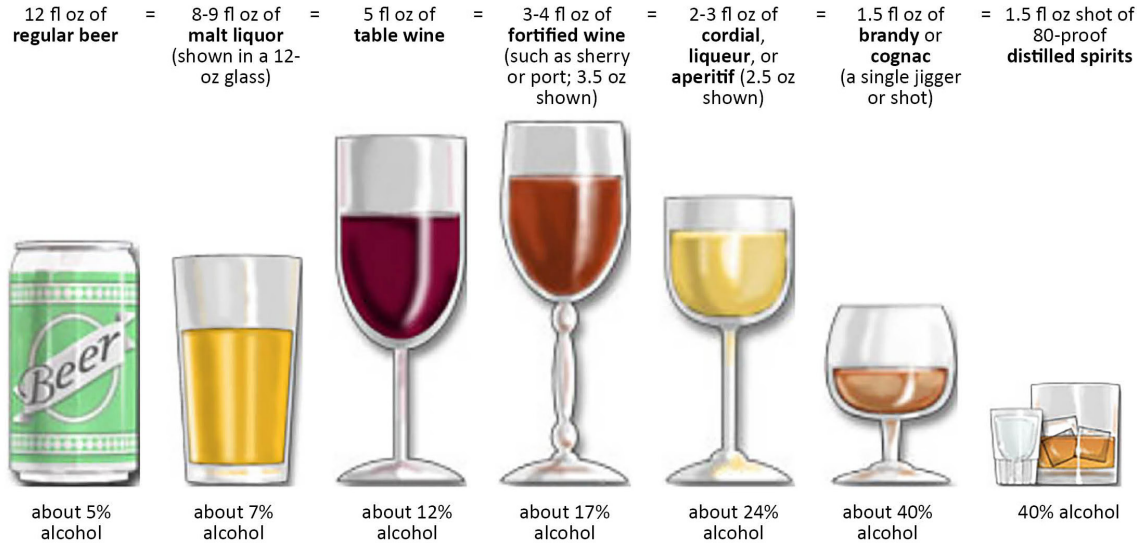
Association for Frontotemporal Degeneration (AFTD)—Newly Diagnosed
www.theaftd.org/living-with-ftd/newly-diagnosed
Resource summary: This webpage has information on and links to AFTD's Helpline, a detailed guide for people diagnosed with FTD, online and local support groups, printable FTD awareness cards, FTD FAQs, and caregiver resources.

NIA—Dementia
www.nia.nih.gov/health/topics/dementia
Resource summary: This webpage provides health information about dementia—the different types of dementia, assessment and diagnosis, mixed dementia, end-of-life care for people with the disease, biomarker research, and support services. The page also contains links to other information on the NIA site, such as research and funding, news and events, and a free app for understanding medical scans.

Provider Tools

General

Alcohol Use Quantity and Frequency Guidelines



Federal guidelines define the following levels of alcohol consumption; however, these numbers are applied to all adults, and older adults may need to adhere to lower amounts:[1438,1439,1440,1441]

Moderate drinking:

- **Men:** No more than two standard drinks per day.
- **Women:** No more than one standard drink per day.
- **Both:** The numbers apply to any given day and are not meant as averages over multiple days.

Binge drinking:

- **Men:** More than four standard drinks in a single day.
- **Women:** More than three standard drinks in a single day.

Older adults should not drink any alcohol if they:

- Are taking certain prescription medications, especially psychoactive prescription medications (e.g., opioid analgesics and benzodiazepines).
- Have medical conditions that can be made worse by alcohol (e.g., diabetes, heart disease).
- Are planning to drive a car or engage in other activities requiring alertness and skill.
- Are recovering from AUD.

Provider Note: Guidelines are based on the standard drink equivalency provided. When you are taking a drinking history and assessing risk level, explore your client's understanding of the meaning of "a drink" and the kind of alcoholic beverage they drink. For example, a typical mixed drink might be the equivalent of 1 to 3 standard drinks.[1442] Provide nonjudgmental feedback to clarify quantity and frequency estimates and to determine whether your client is consuming more than the recommended amount.

Adapted from material in the public domain.[1443,1444]

Alcohol Misuse and Drug Use

Alcohol and Drug Screening and Assessment Tools

Short Michigan Alcoholism Screening Test-Geriatric Version (SMAST-G)
Resource summary: The SMAST-G is a screening tool for identifying alcohol misuse in older adults. It can be used in a variety of clinical settings, including general healthcare practices.

Short Michigan Alcoholism Screening Test-Geriatric Version (SMAST-G)

		Yes (1)	No (0)
1.	When talking with others, do you ever underestimate how much you drink?		
2.	After a few drinks, have you sometimes not eaten or been able to skip a meal because you didn't feel hungry?		
3.	Does having a few drinks help decrease your shakiness or tremors?		
4.	Does alcohol sometimes make it hard for you to remember parts of the day or night?		
5.	Do you usually take a drink to relax or calm your nerves?		
6.	Do you drink to take your mind off your problems?		
7.	Have you ever increased your drinking after experiencing a loss in your life?		
8.	Has a doctor or nurse ever said they were worried or concerned about your drinking?		
9.	Have you ever made rules to manage your drinking?		
10.	When you feel lonely, does having a drink help?		

TOTAL SMAST-G-SCORE (0-10) _____

SCORING: 2 OR MORE "YES" RESPONSES IS INDICATIVE OF AN ALCOHOL PROBLEM.

Ask the extra question below but do not calculate it in the final score.
Extra question: Do you drink alcohol and take mood or mind-altering drugs, including prescription tranquilizers, prescription sleeping pills, prescription pain pills, or any illicit drugs?

Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5): AUD Criteria and Older Adults Who Drink
Resource summary: This tool summarizes physical, cognitive, and social aspects of aging to consider when using DSM-5 diagnostic criteria to assess and diagnose AUD in older adults.

DSM-5 Criteria and Older Adults Who Drink

DSM-5 CRITERIA FOR AUD[1446]	CLINICAL CONSIDERATIONS[1447,1448,1449]
Criterion A1	Older adults may need less alcohol to feel physical effects. Cognitive impairment can make it hard for older adults to keep track of their drinking.
Criterion A2	No special considerations for older adults.
Criterion A3	Effects of alcohol can result from drinking even small amounts, so relatively less time may be spent getting and drinking alcohol and recovering from using it.
Criterion A4	No special considerations for older adults.
Criterion A5	Older adults may have different role responsibilities because of life-stage changes, such as retirement. Role responsibilities more common in older adulthood include caregiving for a spouse or another family member, such as a grandchild.
Criterion A6	Older adults may not realize that social or interpersonal problems they are experiencing are connected to their alcohol use.
Criterion A7	Older adults may take part in fewer activities generally, making it more difficult to discover when drinking is causing them to withdraw from activities.
Criterion A8	Older adults may not understand that their alcohol use is hazardous, especially when they are drinking the same as or less than before. In addition, older adults may not realize the physical dangers of drinking in certain situations (e.g., before using a step stool).
Criterion A9	Older adults experiencing physical or psychological problems may not realize that drinking could be a factor.
Criterion A10	Changes in tolerance occur because of increased sensitivity to alcohol with age. Previously manageable quantities of alcohol may cause greater impairment.
Criterion A11	Withdrawal symptoms in older adults can last longer, be less obvious, or be mistaken for age-related illness.

Comorbidity Alcohol Risk Evaluation Tool (CARET)
Resource summary: The CARET screens for at-risk drinking in older adults by pairing quantity and frequency of drinking with specific drinking behaviors, use of medications, and co-occurring conditions in the past 12 months. For more information about the items in the CARET and how to score them, please see Barnes et al., 2010.[1450]

Alcohol Use Disorders Identification Test (AUDIT)
www.drugabuse.gov/sites/default/files/audit.pdf
Resource summary: This validated screening tool was designed by WHO to assess alcohol misuse. The modified version is useful for screening older adults, using a lower cutoff score than used for general adult populations. The adapted provider interview and client self-report versions are included here.

Alcohol Use Disorders Identification Test (AUDIT): Interview Version

Read questions as written. Record answers carefully. Begin the AUDIT by saying "Now I am going to ask you some questions about your use of alcoholic beverages during this past year." Explain what is meant by "alcoholic beverages" by using local examples of beer, wine, vodka, etc. Code answers in terms of "standard drinks." Place the correct answer number in the box at the right.

1. How often do you have a drink containing alcohol?
   (0) Never [Skip to Qs 9-10]
   (1) Monthly or less
   (2) 2 to 4 times a month
   (3) 2 to 3 times a week
   (4) 4 or more times a week

2. How many drinks containing alcohol do you have on a typical day when you are drinking?
   (0) 1 or 2
   (1) 3 or 4
   (2) 5 or 6
   (3) 7, 8, or 9
   (4) 10 or more

3. How often do you have six or more drinks on one occasion?
   (0) Never
   (1) Less than monthly
   (2) Monthly
   (3) Weekly
   (4) Daily or almost daily
   Skip to Questions 9 and 10 if Total Score for Questions 2 and 3 = 0

4. How often during the last year have you found that you were not able to stop drinking once you had started?
   (0) Never
   (1) Less than monthly
   (2) Monthly
   (3) Weekly
   (4) Daily or almost daily

5. How often during the last year have you failed to do what was normally expected from you because of drinking?
   (0) Never
   (1) Less than monthly
   (2) Monthly
   (3) Weekly
   (4) Daily or almost daily

6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?
   (0) Never
   (1) Less than monthly
   (2) Monthly
   (3) Weekly
   (4) Daily or almost daily

7. How often during the last year have you had a feeling of guilt or remorse after drinking?
   (0) Never
   (1) Less than monthly
   (2) Monthly
   (3) Weekly
   (4) Daily or almost daily

8. How often during the last year have you been unable to remember what happened the night before because you had been drinking?
   (0) Never
   (1) Less than monthly
   (2) Monthly
   (3) Weekly
   (4) Daily or almost daily

9. Have you or someone else been injured as a result of your drinking?
   (0) No
   (2) Yes, but not in the last year
   (4) Yes, during the last year

10. Has a relative or friend or a doctor or another health worker been concerned about your drinking or suggested you cut down?
    (0) No
    (2) Yes, but not in the last year
    (4) Yes, during the last year

Record total of specific items here

Scoring: The cutoff score indicating hazardous and harmful alcohol use for the AUDIT is generally 8; however, for older adults a score of 5 indicates a need for clarifying questions and further assessment.[1451]

Adapted from Barbor et al. (2001).[1452]

Alcohol Use Disorders Identification Test (AUDIT): Self-Report Version

CLIENT: Alcohol use can affect your health and interfere with some medications and treatments, so it's important that we ask some questions about your alcohol use. Your answers will remain confidential; please be honest.

Place an X in one box that best describes your answer to each question.

Questions	0	1	2	3	4	
1. How often do you have a drink containing alcohol?	Never	Monthly or less	2-4 times a month	2-3 times a week	4 or more times a week	
2. How many drinks containing alcohol do you have on a typical day when you are drinking?	1 or 2	3 or 4	5 or 6	7 to 9	10 or more	
3. How often do you have six or more drinks on one occasion?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
4. How often during the last year have you found that you were not able to stop drinking once you had started?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
5. How often during the last year have you failed to do what was normally expected of you because of drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
7. How often during the last year have you had a feeling of guilt or remorse after drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
8. How often during the last year have you been unable to remember what happened the night before because of your drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
9. Have you or someone else been injured because of your drinking?	No		Yes, but not in the last year		Yes, during the last year	
10. Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down?	No		Yes, but not in the last year		Yes, during the last year	
					Total	

Adapted from Barbor et al. (2001).[1453]

Provider Note: The self-report version should be given to older clients to fill out. Ask them to return it to you, and then discuss the results with them. A cutoff score of 5 means you need to assess further.[1454]

Alcohol Use Disorders Identification Test-C (AUDIT-C)
Resource summary: The AUDIT-C is a much shorter version of the AUDIT that can help you identify alcohol misuse in your clients. It contains only three questions, which add up to a total score of 0–12. A higher score usually means the client is engaging in more hazardous alcohol use. The AUDIT-C is scored as follows:

- For Questions 1 and 3, assign 0 points to response a, 1 point to response b, 2 points to response c, 3 points to response d, and 4 points to response e.
- For Question 2, assign 0 points to responses a and b, 1 point to response c, 2 points to response d, 3 points to response e, and 4 points to response f.

A total score of 3 or higher for women and 4 or higher for men means problematic alcohol use. In such cases, you should assess further (or refer for formal assessment) to learn more about the client's drinking habits and determine whether AUD is present. Learn more about the AUDIT-C, including how to score and interpret results, at www.queri.research.va.gov/tools/alcohol-misuse/alcohol-faqs.cfm#top.

Alcohol Use Disorders Identification Test-C (AUDIT-C)

Patient Name: _____ **Date:**_____

1. **How often do you have a drink containing alcohol?**
   - ☐ a. Never
   - ☐ b. Monthly or less
   - ☐ c. 2-4 times a month
   - ☐ d. 2-3 times a week
   - ☐ e. 4 or more times a week

2. **How many drinks containing alcohol did you have on a typical day when you were drinking in the past year?**
   - ☐ a. 0 drinks
   - ☐ b. 1 or 2
   - ☐ c. 3 or 4
   - ☐ d. 5 or 6
   - ☐ e. 7 to 9
   - ☐ f. 10 or more

3. **How often do you have six or more drinks on one occasion?**
   - ☐ a. Never
   - ☐ b. Less than monthly
   - ☐ c. Monthly
   - ☐ d. Weekly
   - ☐ e. Daily or almost daily

Adapted from material in the public domain.[1455,1456]

Senior Alcohol Misuse Indicator (SAMI)
Resource summary: SAMI is a tool for assessing older adults who may have at-risk alcohol use. A score of 1 or higher suggests at-risk drinking.

Senior Alcohol Misuse Indicator (SAMI)

1a. Have you recently (in the last few months) experienced problems with any of the following (if yes, please check box):

- ☐ Changes in sleep?
- ☐ Changes in appetite or weight?
- ☐ Dizziness?
- ☐ Drowsiness?
- ☐ Difficulty remembering things?
- ☐ Poor balance?
- ☐ Falls?

1b. Have you recently (in the last few months) experienced problems with any of the following (if yes, please check box):

- ☐ Feelings of sadness?
- ☐ Lack of interest in daily activities?
- ☐ Feelings of worthlessness?
- ☐ Loneliness?
- ☐ Feelings of anxiety?

2. Do you enjoy wine/beer/spirits? Which do you prefer?

_____

3. As your life has changed, how has your use of [selected] wine/beer/spirits changed?

_____

4. Do you find you enjoy [selected] wine/beer/spirits as much as you used to? ☐ Yes ☐ No
(For clinical use. Not included in scoring.)

5. You mentioned that you have difficulties with_____ (from answers to questions 1a and b). I am wondering if you think that [selected] wine/beer/spirits might be connected? ☐ Yes ☐ No

SCORING KEY

Single responses (a score of 1 for each response):

Question 2:
I enjoy **all three** of wine/beer/spirits OR
I enjoy **a combination of any two** from wine/beer/spirits ☐

Question 3:
I have **increased** alcohol consumption from when I was younger ☐

Question 5:
Yes, there **may be** a connection between my alcohol use and health ☐

SUBTOTAL 1 = _____ /3

Multiple responses (a score of 1 for each combination of responses):

Question 2 & 3:
Yes, I do enjoy alcohol
There has been **no change** in alcohol consumption
=> If both responses provided, check box => ☐

Question 1, 2 & 3:
Yes, I have experienced **5 or more** symptoms
Yes, I do enjoy alcohol
Indicates any current alcohol consumption (regardless of any change in pattern)
=> If all three responses provided, check box => ☐

SUBTOTAL 2 = _____ /2

TOTAL SCORE = SUBTOTAL 1 + SUBTOTAL 2 = _____

Cannabis Use Disorder Identification Test-Revised (CUDIT-R)[1458]
https://adai.uw.edu/instruments/pdf/Cannabis%20Use%20Disorders%20Identification%20Test%20Revised%2059.pdf
Resource summary: This test measures problem cannabis use in the past 6 months. A score of 8 or more indicates hazardous use; a score of 12 or more indicates the need to assess for cannabis use disorder.

Cannabis Use Disorder Identification Test-Revised (CUDIT-R)

1. How often do you use cannabis?

Never	Monthly or less	2-4 times a month	2-3 times a week	4 or more times a week
0	1	2	3	4

2. How many hours were you "stoned" on a typical day when you had been using cannabis?

Less than 1	1 or 2	3 or 4	5 or 6	7 or more
0	1	2	3	4

3. How often during the past 6 months did you find that you were not able to stop using cannabis once you had started?

Never	Less than monthly	Monthly	Weekly	Daily or almost daily
0	1	2	3	4

4. How often during the past 6 months did you fail to do what was normally expected from you because of using cannabis?

Never	Less than monthly	Monthly	Weekly	Daily or almost daily
0	1	2	3	4

5. How often in the past 6 months have you devoted a great deal of your time to getting, using, or recovering from cannabis?

Never	Less than monthly	Monthly	Weekly	Daily or almost daily
0	1	2	3	4

6. How often in the past 6 months have you had a problem with your memory or concentration after using cannabis?

Never	Less than monthly	Monthly	Weekly	Daily or almost daily
0	1	2	3	4

7. How often do you use cannabis in situations that could be physically hazardous, such as driving, operating machinery, or caring for children?

Never	Less than monthly	Monthly	Weekly	Daily or almost daily
0	1	2	3	4

8. Have you ever thought about cutting down, or stopping, your use of cannabis?

Never	Yes, but not in the past 6 months	Yes, during the past 6 months
0	2	4

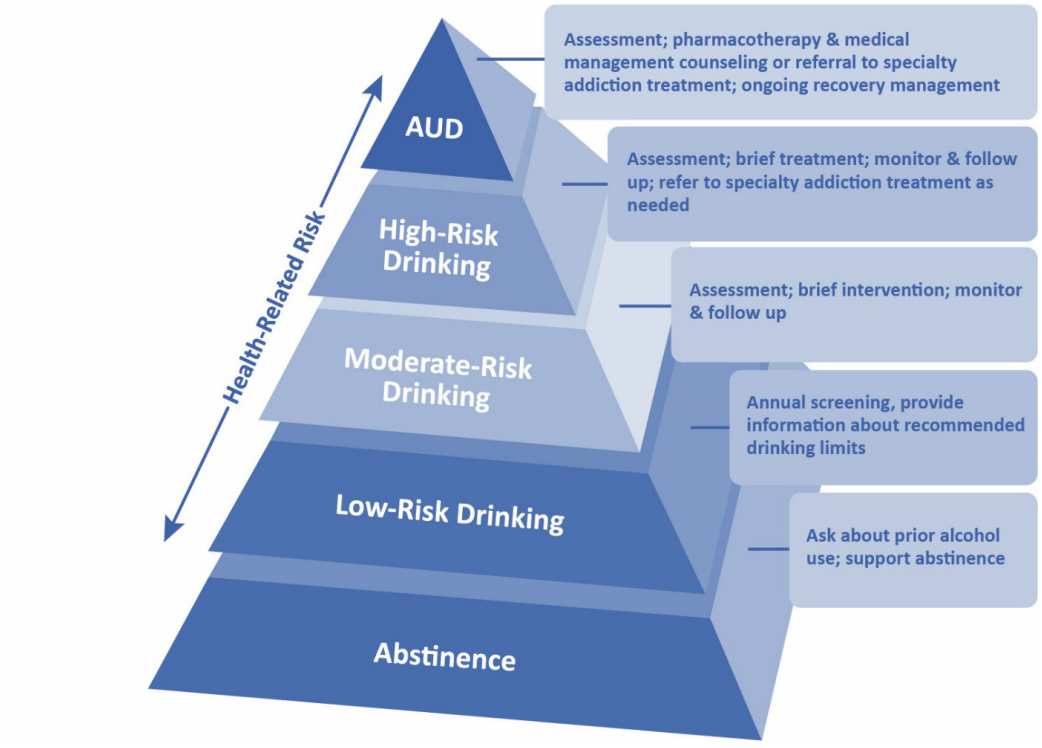
Reprinted from material in the public domain.[1459]

CAGE Adapted to Include Drugs (CAGE-AID)
Resource summary: The CAGE (Cut down, Annoyed, Guilty, Eye opener) Questionnaire has been widely used to screen for risk of alcohol misuse. This similar version, the CAGE-AID,[1460] asks about alcohol misuse and drug use. A "yes" response to any of the questions can mean that substance misuse is present. However, the CAGE-AID does not ask about certain important aspects of substance use, including past substance use, frequency of use, and effects of using the substance. It is available at www.hiv.uw.edu/page/substance-use/cage-aid.

Treatment Planning

Alcohol Health-Related Risk and Treatment Response Pyramid[1461,1462,1463]
Resource summary: The Alcohol Health-Related Risk and Treatment Response Pyramid illustrates how to apply clinical interventions to corresponding levels of health-related risk associated with drinking. It can be used to assess older adults' risks.

Alcohol Health-Related Risk and Treatment Response Pyramid



Alcohol Use Agreement and Drinking Diary Cards
Resource summary: Providers can use these sample forms to develop an alcohol consumption agreement with clients and help them track their daily drinking.

Alcohol Use Agreement and Drinking Diary Cards

The purpose of this step is to decide on a drinking limit for yourself for a particular period of time. Negotiate with your healthcare provider so you can both agree on a reasonable goal. A reasonable goal for some people is abstinence—not drinking any alcohol.

As you develop this agreement, answer the following questions:

- How many standard drinks?
- How frequently?
- For what period of time?

Agreement

Date _____

_____

_____

_____

Client signature _____

Clinician signature _____

Drinking Diary Card

One way to keep track of how much you drink is the use of drinking diary cards. One card is used for each week. Every day record the number of drinks you had. At the end of the week add up the total number of drinks you had during the week.

Card A

Keep Track of What You Drink Over The Next 7 Days

Starting Date _____				
	Beer	Wine	Liquor	Number
Sunday				
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				
			WEEK'S TOTAL:	

Card B

Keep Track of What You Drink Over The Next 7 Days

Starting Date _____				
	Beer	Wine	Liquor	Number
Sunday				
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				
			WEEK'S TOTAL:	

Adapted from material in the public domain.[1464]

Behavioral Health and Cognitive Impairment Screening and Assessment Tools

Generalized Anxiety Disorder (GAD-7) Screening Tool
Resource summary: This well-established diagnostic tool diagnoses anxiety and measures its severity. It is a self-report scale that asks individuals to rate symptoms over the past 2 weeks. The GAD-7 has been validated with older adults with a cutoff score of 5 for older adults indicating a need for further assessment.[1465] For more on the GAD-7 and its questions, see the article "A Brief Measure for Assessing Generalized Anxiety Disorder: The GAD-7" by Spitzer and colleagues at https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/410326.[1466]

Geriatric Anxiety Scale (GAS)
www.uccs.edu/agingandmentalhealthlab/scale
Resource summary: The Geriatric Anxiety Scale is a 30-item measure developed for and validated in older adult populations.[1467] It is a self-report measure that assesses somatic, affective, and cognitive symptoms of anxiety over the past 7 days. A shorter 10-item version is also available; it is also valid and reliable for older adults.[1468]

Geriatric Anxiety Scale (GAS)

Below is a list of common symptoms of anxiety or stress. Please read each item in the list carefully. Indicate how often you have experienced each symptom during the **PAST WEEK, INCLUDING TODAY,** by checking under the corresponding answer.

	Not at all (0)	Sometimes (1)	Most of the time (2)	All of the time (3)
1. My heart raced or beat strongly.				
2. My breath was short.				
3. I had an upset stomach.				
4. I felt like things were not real or like I was outside of myself.				
5. I felt like I was losing control.				
6. I was afraid of being judged by others.				
7. I was afraid of being humiliated or embarrassed.				
8. I had difficulty falling asleep.				
9. I had difficulty staying asleep.				
10. I was irritable.				
11. I had outbursts of anger.				
12. I had difficulty concentrating.				
13. I was easily startled or upset.				
14. I was less interested in doing something I typically enjoy.				
15. I felt detached or isolated from others.				

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Continued

	Not at all (0)	Sometimes (1)	Most of the time (2)	All of the time (3)
16. I felt like I was in a daze.				
17. I had a hard time sitting still.				
18. I worried too much.				
19. I could not control my worry.				
20. I felt restless, keyed up, or on edge.				
21. I felt tired.				
22. My muscles were tense.				
23. I had back pain, neck pain, or muscle cramps.				
24. I felt like I had no control over my life.				
25. I felt like something terrible was going to happen to me.				
26. I was concerned about my finances.				
27. I was concerned about my health.				
28. I was concerned about my children.				
29. I was afraid of dying.				
30. I was afraid of becoming a burden to my family or children.				

GAS Scoring Instructions

Items 1 through 25 are scorable items. Each item ranges from 0 to 3. Each item loads on only one scale. Items 26 through 30 are used to help clinicians identify areas of concern for the respondent. They are not used to calculate the total score of the GAS or any subscale.

Total Score = sum of items 1 through 25.
Somatic subscale (9 items) = sum of items 1, 2, 3, 8, 9, 17, 21, 22, 23
Cognitive subscale (8 items) = sum of items 4, 5, 12, 16, 18, 19, 24, 25
Affective subscale (8 items) = sum of items 6, 7, 10, 11, 13, 14, 15, 20

Penn State Worry Questionnaire (PSWQ)
Resource summary: The PSWQ is a 16-item self-report questionnaire that measures worrying (e.g., how much a person worries, the effects of worrying on a person).

Penn State Worry Questionnaire (PSWQ)

Instructions: Rate each of the following statements on a scale of 1 ("not at all typical of me") to 5 ("very typical of me"). Please do not leave any items blank.

		Not at all typical of me				Very typical of me
1.	If I do not have enough time to do everything, I do not worry about it.	1	2	3	4	5
2.	My worries overwhelm me.	1	2	3	4	5
3.	I do not tend to worry about things.	1	2	3	4	5
4.	Many situations make me worry.	1	2	3	4	5
5.	I know I should not worry about things, but I just cannot help it.	1	2	3	4	5
6.	When I am under pressure I worry a lot.	1	2	3	4	5
7.	I am always worrying about something.	1	2	3	4	5
8.	I find it easy to dismiss worrisome thoughts.	1	2	3	4	5
9.	As soon as I finish one task, I start to worry about everything else I have to do.	1	2	3	4	5
10.	I never worry about anything.	1	2	3	4	5
11.	When there is nothing more I can do about a concern, I do not worry about it anymore.	1	2	3	4	5
12.	I have been a worrier all my life.	1	2	3	4	5
13.	I notice that I have been worrying about things.	1	2	3	4	5
14.	Once I start worrying, I cannot stop.	1	2	3	4	5
15.	I worry all the time.	1	2	3	4	5
16.	I worry about projects until they are all done.	1	2	3	4	5

Scoring: Each of the 16 items is rated on a 5-point scale. Items 1, 3, 8, 10, and 11 are reverse scored as follows:

- Very typical of me = 1 (circled 5 on the sheet)
- Circled 4 on the sheet = 2
- Circled 3 on the sheet = 3
- Circled 2 on the sheet = 4
- Not at all typical of me = 5 (circled 1 on the sheet)

The remaining items are scored regularly. The item scores are added to produce a total score ranging from 16 to 80, with higher scores reflecting more worry. **A score of 50 or higher by an older person could mean significant worries are present,** but research on cutoff scores in older people is too limited to know for certain.[1471] Do not assume that an older client who scores below 50 does not have anxiety.

Geriatric Depression Scale (GDS)–Short Form
https://web.stanford.edu/~yesavage/GDS.html
Resource summary: The GDS–Short Form is one of the most popular depression screeners for older adults. The version of the GDS that should be given to clients is shown first below, followed by the scoring version. Clients with a GDS score of 6 or greater need further assessment and may need treatment for major depressive disorder (MDD).[1472] Clients with a GDS score below 6 should be screened again in 1 month if symptoms of depression are still present.[1473] If a client's depressive symptoms are no longer present in 1 month, give the depression screener again in 6 months.[1474]

Geriatric Depression Scale (GDS)–Short Form

Client Version

Client's Name: Date:

Instructions: Circle the best answer for how you felt over the past week.

1.	Are you basically satisfied with your life?	Yes	No
2.	Have you dropped many of your activities and interests?	Yes	No
3.	Do you feel that your life is empty?	Yes	No
4.	Do you often get bored?	Yes	No
5.	Are you in good spirits most of the time?	Yes	No
6.	Are you afraid that something bad is going to happen to you?	Yes	No
7.	Do you feel happy most of the time?	Yes	No
8.	Do you often feel helpless?	Yes	No
9.	Do you prefer staying at home, rather than going out and doing new things?	Yes	No
10.	Do you feel you have more problems with memory than most people?	Yes	No
11.	Do you think it is wonderful to be alive now?	Yes	No
12.	Do you feel pretty worthless the way you are now?	Yes	No
13.	Do you feel full of energy?	Yes	No
14.	Do you feel that your situation is hopeless?	Yes	No
15.	Do you think that most people are better off than you are?	Yes	No

Scoring Version

Client's Name: Date:

Scoring: Count boldface responses for a total score. A score of 0–5 is normal. A score of 6 or above suggests depression.

Instructions: Circle the best answer for how you felt over the past week.

1.	Are you basically satisfied with your life?	Yes	**No**
2.	Have you dropped many of your activities and interests?	**Yes**	No
3.	Do you feel that your life is empty?	**Yes**	No

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Continued

4.	Do you often get bored?	**Yes**	No
5.	Are you in good spirits most of the time?	Yes	**No**
6.	Are you afraid that something bad is going to happen to you?	**Yes**	No
7.	Do you feel happy most of the time?	Yes	**No**
8.	Do you often feel helpless?	**Yes**	No
9.	Do you prefer to stay at home, rather than going out and doing new things?	**Yes**	No
10.	Do you feel you have more problems with memory than most people?	**Yes**	No
11.	Do you think it is wonderful to be alive now?	Yes	**No**
12.	Do you feel pretty worthless the way you are now?	**Yes**	No
13.	Do you feel full of energy?	Yes	**No**
14.	Do you feel that your situation is hopeless?	**Yes**	No
15.	Do you think that most people are better off than you are?	**Yes**	No

The Client Version and Scoring Version of the GDS–Short Form were both adapted from material in the public domain.[1475]

Patient Health Questionnaire (PHQ-9)
https://cde.drugabuse.gov/instrument/f226b1a0-897c-de2a-e040-bb89ad4338b9
Resource summary: The PHQ-9 is a nine-item screener for depression in adults of any age. It is tested and approved for use with older clients.[1476] The screener is also useful for monitoring depression severity and treatment response in clients who have already screened positive for or been diagnosed with depression. A two-item version of the PHQ-9 is available (the PHQ-2) that includes only the first two questions from the PHQ-9. However, compared with the PHQ-9, the PHQ-2 has a higher likelihood of giving older adults a false positive (that is, incorrectly rating a person as depressed when they are not).[1477] To get more reliable results, you should give the full PHQ-9. If you give the PHQ-2, be sure to give the full PHQ-9 to older adults who have a total score of 3 or higher.[1478]

Scoring: The total score for the PHQ-9 is derived by first summing each column (e.g., each item chosen in column "More than half the days" = 2), then summing the column totals. Total scores range from 0 to 27 and indicate the following levels of depression severity:

0–4: None-minimal
5–9: Mild depression
10–14: Moderate depression
15–19: Moderately severe depression
20–27: Severe depression

In addition to the total score, review responses to Question #9 (suicidality) and the unnumbered question below it (the effect of symptoms on the client's daily functioning) when determining whether to initiate or refer for further assessment and treatment.[1479,1480,1481]

PTSD Checklist for DSM-5 (PCL-5)
www.ptsd.va.gov/professional/assessment/adult-sr/ptsd-checklist.asp
Resource summary: The PTSD Checklist for DSM-5 has been approved for use with older adults.[1482] The VA gives instructions on how to use the tool. A score of 50 often means PTSD is present.[1483] However, in older clients a score of 50 may be too high and might not catch all older people with possible PTSD.[1484] Because of this, a cutoff score of 34 is better for adults ages 50 to 64, and a cutoff score of 24 is better for adults ages 65 to 81.[1485]

PTSD Checklist for DSM-5 (PCL-5)

Instructions: Below is a list of problems that people sometimes have in response to a very stressful experience. Please read each problem carefully and then circle one of the numbers to the right to indicate how much you have been bothered by that problem **in the past month.**

In the past month, how much were you bothered by:	Not at all	A little bit	Moderately	Quite a bit	Extremely
1. Repeated, disturbing, and unwanted memories of the stressful experience?	0	1	2	3	4
2. Repeated, disturbing dreams of the stressful experience?	0	1	2	3	4
3. Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)?	0	1	2	3	4
4. Feeling very upset when something reminded you of the stressful experience?	0	1	2	3	4
5. Having strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating)?	0	1	2	3	4
6. Avoiding memories, thoughts, or feelings related to the stressful experience?	0	1	2	3	4
7. Avoiding external reminders of the stressful experience (for example, people, places, conversations, activities, objects, or situations)?	0	1	2	3	4
8. Trouble remembering important parts of the stressful experience?	0	1	2	3	4
9. Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as: I am bad, there is something seriously wrong with me, no one can be trusted, the world is completely dangerous)?	0	1	2	3	4

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Continued

In the past month, how much were you bothered by:	Not at all	A little bit	Moderately	Quite a bit	Extremely
10. Blaming yourself or someone else for the stressful experience or what happened after it?	0	1	2	3	4
11. Having strong negative feelings such as fear, horror, anger, guilt, or shame?	0	1	2	3	4
12. Loss of interest in activities that you used to enjoy?	0	1	2	3	4
13. Feeling distant or cut off from other people?	0	1	2	3	4
14. Trouble experiencing positive feelings (for example, being unable to feel happiness or have loving feelings for people close to you)?	0	1	2	3	4
15. Irritable behavior, angry outbursts, or acting aggressively?	0	1	2	3	4
16. Taking too many risks or doing things that could cause you harm?	0	1	2	3	4
17. Being "superalert" or watchful or on guard?	0	1	2	3	4
18. Feeling jumpy or easily startled?	0	1	2	3	4
19. Having difficulty concentrating?	0	1	2	3	4
20. Trouble falling or staying asleep?	0	1	2	3	4

Reprinted from material in the public domain.[1486] A digital, fillable form is available online (www.ptsd.va.gov/professional/assessment/documents/PCL5_Standard_form.PDF).

Primary Care PTSD Screen for DSM-5 (PC-PTSD-5)[1487]
www.ptsd.va.gov/professional/assessment/documents/pc-ptsd5-screen.pdf
Resource summary: The PC-PTSD-5 is used to screen clients for PTSD. A score of 3 or more "yes" responses is considered cause for more indepth screening.

Primary Care PTSD Screen for DSM-5 (PC-PTSD-5)

Sometimes things happen to people that are unusually or especially frightening, horrible, or traumatic. For example:

- a serious accident or fire
- a physical or sexual assault or abuse
- an earthquake or flood
- a war
- seeing someone be killed or seriously injured
- having a loved one die through homicide or suicide.

Have you ever experienced this kind of event?

YES NO

If no, screen total = 0. Please stop here.

If yes, please answer the questions below.

In the past month, have you...

1. had nightmares about the event(s) or thought about the event(s) when you did not want to?

   YES NO

2. tried hard not to think about the event(s) or went out of your way to avoid situaitons that reminded you of the event(s)?

   YES NO

3. been constantly on guard, watchful, or easily startled?

   YES NO

4. felt numb or detached from people, activities, or your surroundings?

   YES NO

5. felt guilty or unable to stop blaming yourself or others for the event(s) or any problems the event(s) may have caused?

   YES NO

Reprinted from material in the public domain.[1488] *This tool and additional information on it can be found online (www.ptsd.va.gov/professional/assessment/documents/pc-ptsd5-screen.pdf).*

Health and Wellness

Health and Wellness Screening and Assessment Tools

Elder Abuse Suspicion Index© (EASI©)[1489]
www.mcgill.ca/familymed/research/projects/elder
Resource summary: The EASI© is a short questionnaire about abuse of older people. You should ask Questions 1 through 5 directly to the client. Questions apply to the last 12 months. You can answer Question 6 yourself. A "yes" response on one or more questions (other than on Question 1) is considered a positive screen. This tool is available and validated in English and French.

Elder Abuse Suspicion Index© (EASI©)

EASI© Questions Q.1-Q.5 asked of patient; Q.6 answered by doctor *(Within the last 12 months)*			
1) Have you relied on people for any of the following: bathing, dressing, shopping, banking, or meals?	**YES**	**NO**	**Did not answer**
2) Has anyone prevented you from getting food, clothes, medication, glasses, hearing aids or medical care, or from being with people you wanted to be with?	**YES**	**NO**	**Did not answer**
3) Have you been upset because someone talked to you in a way that made you feel shamed or threatened?	**YES**	**NO**	**Did not answer**
4) Has anyone tried to force you to sign papers or to use your money against your will?	**YES**	**NO**	**Did not answer**
5) Has anyone made you afraid, touched you in ways that you did not want, or hurt you physically?	**YES**	**NO**	**Did not answer**
6) **Doctor:** Elder abuse may be associated with findings such as: poor eye contact, withdrawn nature, malnourishment, hygiene issues, cuts, bruises, inappropriate clothing, or medication compliance issues. Did you notice any of these today or in the last 12 months?	**YES**	**NO**	**Not sure**

Reprinted with permission. Yaffe MJ, Wolfson C, Weiss D, Lithwick M. Development and validation of a tool to assist physicians' identification of elder abuse: The Elder Abuse Suspicion Index (EASI©). Journal of Elder Abuse and Neglect, 2008; 20 (3): 276-300. This tool is available online (www.mcgill.ca/familymed/research/projects/elder).

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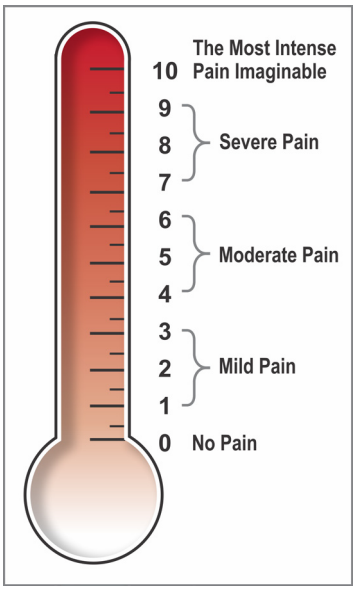
Revised Iowa Pain Thermometer (IPT-R)
Resource summary: The IPT-R is easy for older patients to understand and to use. It is approved for use in older adults, including those from diverse racial and ethnic populations.[1490] The IPT-R can also be used with older adults with cognitive impairment.[1491]

Revised Iowa Pain Thermometer (IPT-R)



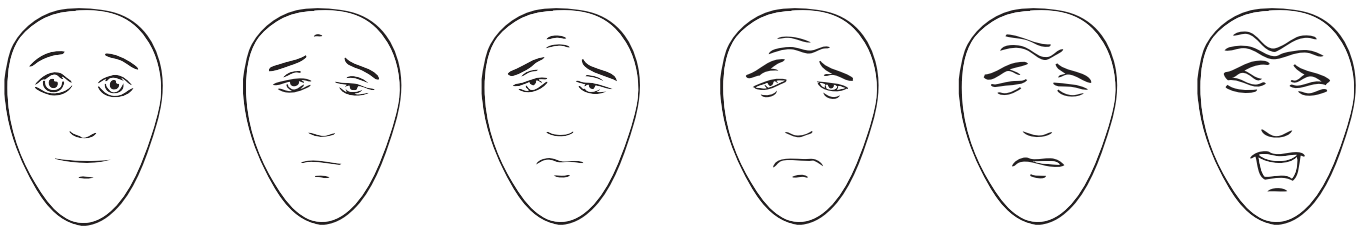
Revised Iowa Pain Thermometer (IPT-R, 2011) printed with permission. © Keela Herr, The University of Iowa.[1492]

Revised Faces Pain Scale
Resource summary: The revised Faces Pain Scale is easy for older adults to understand and to use. It is approved for use in older adults, including those from diverse racial and ethnic populations.[1493]

In the following instructions, say "hurt" or "pain," whichever seems right for a particular client. "These faces show how much something can hurt. This face [*point to face on far left*] shows no pain. The faces show more and more pain [point to each from left to right] up to this one [*point to face on far right*]—it shows very much pain. Point to the face that shows how much you hurt [right now]."

Score the chosen face 0, 2, 4, 6, 8, or 10, counting left to right. Therefore, "0" = "no pain" and "10" = "very much pain." Do not use words like "happy" or "sad." This scale is intended to measure how a client feels inside, not how his or her face looks.

Revised Faces Pain Scale



Faces Pain Scale – Revised, ©2001, International Association for the Study of Pain [www.iasp-pain.org/FPSR]

Katz Index of Independence in Activities of Daily Living (Katz ADL)[1494,1495]
Resource summary: The Katz ADL is one of the most commonly used instruments for measuring a client's functional status in relation to ADLs. It assesses performance in six areas: bathing, dressing, toileting, transferring, continence, and feeding. A person's ability or inability to perform ADLs and instrumental ADLs (IADLs) is used to gauge the need for care.

Katz Index of Independence in Activities of Daily Living (Katz ADL)

Activities	Independence (1 Point) No supervision, direction, or personal assistance	Dependence (0 Points) With supervision, direction, personal assistance, or total care
BATHING Points: _____	(1 POINT) Bathes self completely or needs help in bathing only a single part of the body, such as the back, genital area, or disabled extremity.	(0 POINTS) Needs help with bathing more than one part of the body, getting in or out of the tub, or shower. Requires total bathing.
DRESSING Points: _____	(1 POINT) Can get clothes from closet and drawers and put on clothes and outer garments complete with fasteners. May have help tying shoes.	(0 POINTS) Needs help with dressing self or needs to be completely dressed.
TOILETING Points: _____	(1 POINT) Goes to the toilet, gets on and off, arranges clothes, and cleans genital area without help.	(0 POINTS) Needs help transferring to the toilet or cleaning self or uses bedpan or commode.
TRANSFERRING Points: _____	(1 POINT) Moves in and out of bed or chair unassisted. Mechanical transfer aids are acceptable.	(0 POINTS) Needs help in moving from bed to chair or requires a complete transfer.
CONTINENCE Points: _____	(1 POINT) Exercises complete self-control over urination and defecation.	(0 POINTS) Is partially or totally incontinent of bowel or bladder.
FEEDING Points: _____	(1 POINT) Gets food from plate into mouth without help. Preparation of food may be done by another person.	(0 POINTS) Needs partial or total help with feeding or requires parenteral feeding.
Total Points: _____ A score of 6 indicates full function; 4, moderate impairment; and 2 or less, severe functional impairment.		

Adapted from Katz, S., Down, T. D., Cash, H. R., & Grotz, R. C. Progress in the development of the index of ADL. Gerontologist 1970, 10(1):20–30. By permission of The Gerontological Society of America.[1496]

Barthel Index

Resource summary: The Barthel Index is a brief, widely used screener for ADLs.[1497,1498,1499] It measures a person's abilities to perform the following: feeding, bathing, grooming, dressing, toileting, bladder and bowel control, transfers, mobility, and using the stairs.

Functional Activities Questionnaire

Resource summary: This tool is used for older adults with normal cognition; mild cognitive impairment; or mild, moderate, or advanced dementia. It is used to measure IADLs.[1500] The questionnaire should be completed by a person who knows the client well (usually a caregiver or adult family member), has observed his or her behavior, and can assess the client's ability to complete IADLs and how much assistance they need, if any.

Lubben Social Network Scale (LSNS)

www.bc.edu/content/bc-web/schools/ssw/sites/lubben/description.html

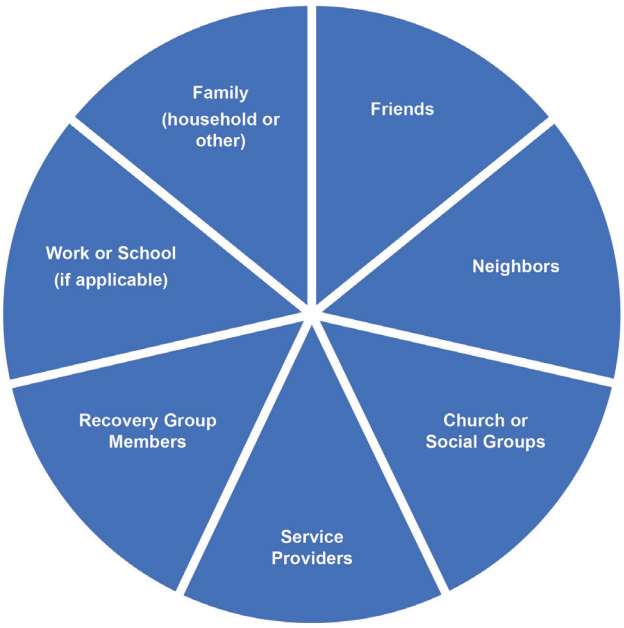
Resource summary: The LSNS is designed for use with older adults. It is intended to gauge the level of a person's social support from family and friends and to determine whether that person's score indicates social isolation, which can contribute to increased mental and physical problems in older adults. Older clients can easily complete the six-item short version (LSNS-6), a self-report questionnaire available at the same website.

Social Network Map

www.researchgate.net/publication/232542443_The_Social_Network_Map_Assessing_Social_Support_in_Clinical_Practice

Resource summary: The Social Network Map is a client-centered tool that collects information on the composition of the older adult's social network, the extent to which network members provide different types of support, and the nature of relationships in the network.[1501] The version below is adapted for older adults in recovery.

Social Network Map for Older Adults in Recovery



Adapted from Tracy & Whittaker (1990).[1502]

The following strategies[1503] will help you and your older clients develop a social network map:

- Create a pie chart with the seven domains. Health, behavioral health service, social service, and peer recovery support providers may be part of the support network clients identify.
- Ask older clients to identify members of their social networks by first name or initials only.
- Ask clients to describe how available (e.g., rarely, sometimes, often) each member of the network is to give emotional, instrumental, or informational support. Give examples and be specific:
  - "Who is available to give you emotional support like comforting you if you are upset or listening if you are stressed?" "How often does this person give you that kind of support?"
  - "Who is available to help you out in a concrete way like giving you a ride or helping with a chore?" "How often does this person give you that kind of support?"
  - "Who would give you information on how to do something new or help you make a big decision?" "How often does this person give you that kind of support?"
- Note the type and frequency of support each person listed in each domain can offer.
- Ask clients to describe how close they are to each member of their network, how long they have known them, and how frequently they see them.
- Ask clients to review the map and identify types of support that may be lacking and strategies for adding new network members to beef up their social support.

Wellness Planning Tools

Collaborative Goal Setting Using SMART
www.samhsa.gov/sites/default/files/nc-smart-goals-fact-sheet.pdf
Resource summary: SMART goals are Specific, Measurable, Attainable, Relevant, and Time-bound. Use the following tips for writing SMART goals related to alcohol and drug use and to health and wellness.

Writing a SMART Goal

Specific: State the goal clearly. Ask the client to be specific. For example, if the goal is "I just want to be healthy," ask "How will you know when you are 'healthy'"? or "What things will you be able to do when you are healthy that you can't do now?"

Measurable: Identify and quantify the observable markers of progress, such as pain levels or the number of days and amount of time the client walked each week. Invite the client to keep a log of these markers so you can discuss the client's progress.

Attainable: Break the goal into smaller, actionable steps. Identify expected barriers and make a plan to address them. For example, if the goal is to get 8 hours of sleep each night, break the goal into smaller tasks, like turn all the lights in the bedroom off at 10 p.m. at least five nights a week. Then ask, "What might keep you from turning the lights off at 10 p.m.?"

Relevant: Make sure the goal reflects what's personally relevant to the individual. Use MI to set the agenda and determine goals on which to focus. Link goals, such as blood pressure control, to the goal of staying healthy.

Time-bound: Define when the goal is to be attained. Help the client be specific about the timeframe. Make it realistic and attainable, based on the client's subjective evaluation. Agree when to check progress.

Haight's Life Review and Experiencing Form
Resource summary: Haight's Life Review provides questions to guide you in conducting a structured life review with older clients.

Haight's Life Review and Experiencing Form

Childhood:

1. What is the very first thing you can remember in your life? Go as far back as you can.
2. What other things can you remember about when you were very young?
3. What was life like for you as a child?
4. What were your parents like? What were their weaknesses, strengths?
5. Did you have any brothers or sisters? Tell me what each was like.
6. Did someone close to you die when you were growing up?
7. Did someone important to you go away?
8. Do you ever remember being very sick?
9. Do you remember having an accident?
10. Do you remember being in a very dangerous situation?
11. Was there anything that was important to you that was lost or destroyed?
12. Was church a large part of your life?
13. Did you enjoy being a boy/girl?

Adolescence:

1. When you think about yourself and your life as a teenager, what is the first thing you can remember about that time?
2. What other things stand out in your memory about being a teenager?
3. Who were the important people for you? Tell me about them. Parents, brothers, sisters, friends, teachers, those you were especially close to, those you admired, those you wanted to be like.
4. Did you attend church and youth groups?
5. Did you go to school? What was the meaning for you?
6. Did you work during these years?
7. Tell me of any hardships you experienced at this time.
8. Do you remember feeling that there wasn't enough food or necessities of life as a child or adolescent?
9. Do you remember feeling left alone, abandoned, not having enough love or care as a child or adolescent?
10. What were the pleasant things about your adolescence?
11. What was the most unpleasant thing about your adolescence?
12. All things considered, would you say you were happy or unhappy as a teenager?
13. Do you remember your first attraction to another person?
14. How did you feel about sexual activities and your own sexual identity?

Family and home:

1. How did your parents get along?
2. How did other people in your home get along?
3. What was the atmosphere in your home?
4. Were you punished as a child? For what? Who did the punishing? Who was the "boss"?
5. When you wanted something from your parents, how did you go about getting it?
6. What kind of person did your parents like the most? The least?
7. Who were you closest to in your family?
8. Who in your family were you most like? In what way?

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Adulthood:

1. What place did religion play in your life?
2. Now I'd like to talk to you about your life as an adult, starting when you were in your twenties up to today. Tell me of the most important events that happened in your adulthood.
3. What was life like for you in your twenties and thirties?
4. What kind of person were you? What did you enjoy?
5. Tell me about your work. Did you enjoy your work? Did you earn an adequate living? Did you work hard during those years? Were you appreciated?
6. Did you form significant relationships with other people?
7. Did you marry?
   (yes) What kind of person was your spouse?
   (no) Why not?
8. Do you think marriages get better or worse over time? Were you married more than once?
9. On the whole, would you say you had a happy or unhappy marriage?
10. Was sexual intimacy important to you?
11. What were some of the main difficulties you encountered during your adult years?
    a) Did someone close to you die? Go away?
    b) Were you ever sick? Have an accident?
    c) Did you move often? Change jobs?
    d) Did you ever feel alone? Abandoned?
    e) Did you ever feel need?

Summary:

1. On the whole, what kind of life do you think you've had?
2. If everything were to be the same would you like to live your life over again?
3. If you were going to live your life over again, what would you change? Leave unchanged?
4. We've been talking about your life for quite some time now. Let's discuss your overall feelings and ideas about your life. What would you say the main satisfactions in your life have been? Try for three. Why were they satisfying?
5. Everyone has had disappointments. What have been the main disappointments in your life?
6. What was the hardest thing you had to face in your life? Please describe it.
7. What was the happiest period of your life? What about it made it the happiest period? Why is your life less happy now?
8. What was the unhappiest period of your life? Why is your life more happy now?
9. What was the proudest moment in your life?
10. If you could stay the same age all your life, what age would you choose? Why?
11. How do you think you've made out in life? Better or worse than what you hoped for?
12. Let's talk a little about you as you are now. What are the best things about the age you are now?
13. What are the worst things about being the age you are now?
14. What are the most important things to you in your life today?
15. What do you hope will happen to you as you grow older?
16. What do you fear will happen to you as you grow older?
17. Have you enjoyed participating in this review of your life?

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Handouts for Clients and Families

The Large-Print Grief Handout, which can be shared with clients, is an example of a brief information tool modified to reflect age-sensitive practices (https://staging.helpguide.org/articles/grief/coping-with-grief-and-loss.htm).

Large-Print Grief Handout

What Is Grief?

Grief is a natural response to loss. It's the emotional suffering you feel when something or someone you love is taken away. Whatever your loss, it's personal to you.

Coping With Grief

Although loss is a part of life that cannot be avoided, there are ways to help cope with the pain, come to terms with your grief, and eventually, find a way to move on with your life. This doesn't mean you will forget your loved one, but you can find a way to hold that individual in your heart and your memories while continuing to live your life. This includes:

- Acknowledging your pain.
- Accepting that grief can bring up many different and unexpected feelings.
- Understanding that your grieving process will be unique to you.
- Seeking out face-to-face support from people who care about you.
- Supporting yourself emotionally by taking care of yourself physically.
- Learning the difference between grief and depression.

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The Grieving Process

Grieving is highly individual; there's no right or wrong way to grieve. The grieving process takes time. Healing happens gradually; it can't be forced or hurried—and **there is no "normal" timetable for grieving**. Some people start to feel better in weeks or months. For others, the grieving process is measured in years. Whatever grief is like for you, it's important to be patient with yourself and allow the process to naturally unfold.

Reprinted with permission.[1506]

The next set of handouts will help you and your clients understand how drinking may conflict with their values, keep track of their drinking, manage their alcohol consumption, and make a change plan around alcohol use.

Does Your Drinking Conflict With Your Top Values?

If you are considering quitting or cutting back on your alcohol intake, it may help to think about whether your drinking conflicts with your top values. You may first need to identify what those values are. Think of your top values as the principles, qualities, and beliefs that are most important to you and that you most want your life to reflect. Examples of values include independence, generosity, and honesty. The Internet has many free exercises on identifying top values. These exercises differ in what values are listed and how you prioritize them, so you may want to look at more than one exercise. Some values exercises can be found at:

- www.smartrecovery.org/smart-recovery-toolbox/values-and-goals-clarification
- https://harvard.az1.qualtrics.com/jfe/form/SV_e35whN7tkXtvlHv
- www.therapistaid.com/worksheets/values-clarification.pdf

Below are several questions to ask yourself about the relationship between your drinking and your top values. Does drinking conflict with any of your top values? If so:

Which values does drinking conflict with? _____

_____

How does drinking conflict with these values? _____

_____

How does this conflict keep you from living out your top values in daily life? Be as specific as possible. _____

_____

_____

_____

Drinking Logs: Many people find using drinking cards or logs helpful in reducing or quitting alcohol consumption. The idea is to write down when and how much you drink. Here is an example of a drink monitoring tool.

Four-Week Drinking Tracker Card

GOAL: No more than ____ drinks on any day and ____ per week.

Week starting	Su	M	T	W	Th	F	Sa	Total
____/____								
____/____								
____/____								
____/____								

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Alcohol Consumption Plan Management: Clients can write plans to remind themselves of the steps they will take to manage their alcohol consumption. If clients have a hard time coming up with ideas, suggest that they get ideas from a supportive family member or friend, healthcare professional, clergyperson, or case manager or social worker if they have one.

Four A's for Managing Alcohol Consumption

AVOID. What are the highly tempting situations in which you might drink more than your plan? Avoid these situations if possible over the next month.

1. _____

2. _____

ALTER. For situations you can't avoid, how can you alter them to make them easier?

1. _____

2. _____

ALTERNATIVES. What can you do with your mouth and hands when you want to drink and it is a day you are not drinking or have already reached your limit?

1. _____

2. _____

ACTION. When you get the urge to drink and it does not fit with your drinking plan, what can you do to be active or busy until the urge passes?

1. _____

2. _____

Are there situations in which it will be a challenge to stay within your drinking limits? If so, list them and what you will do to effectively manage those situations.

1. _____

Plan _____

2. _____

Plan _____

Reprinted with permission from the American Psychological Association.[1508]

Change Plans: Making a written "change plan" will help clients identify and stick with drinking goals.

Writing a Change Plan

Goal (pick one):

____ I want to drink no more than ____ drink(s) per day and no more than ____ drink(s) per week.
(See "What Is Moderate Drinking?" in Chapter 8 before filling out.)

____ I want to stop drinking.

I will begin following my plan on this date: _____.

My most important reasons for changing my drinking are:_____

_____

_____

The situations where I may be most tempted to drink are:_____

_____

_____

_____

Some things I will do and say to handle these situations are:_____

_____

_____

_____

The people who can help me stick to my goal, and the ways they can help, are:_____

_____

_____

_____

Adapted from material in the public domain.[1509]

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Appendix—Bibliography

1 National Institute on Alcohol Abuse and Alcoholism. (n.d.). Drinking levels defined. Retrieved from www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

2 U.S. Department of Health and Human Services & U.S. Department of Agriculture. (2015). *2015–2020 Dietary Guidelines for Americans* (8th ed.). Retrieved from https://health.gov/our-work/food-nutrition/2015-2020-dietary-guidelines

3 National Institute on Alcohol Abuse and Alcoholism. (n.d.). Drinking levels defined. Retrieved from www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

4 Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

5 Kaiser Permanente. (2019). Alcohol use in older adults. Retrieved from https://wa.kaiserpermanente.org/healthAndWellness/index.jhtml?item=%2Fcommon%2FhealthAndWellness%2FhealthyLiving%2Flifestyle%2Falcohol-seniors.html

6 Family Caregiver Alliance. (2019, April 17). Caregiver statistics: Demographics. Retrieved from www.caregiver.org/caregiver-statistics-demographics

7 Drugs.com. (2018). What are drug interactions? Retrieved August 27, 2018, from www.drugs.com/drug_interactions.html

8 Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

9 U.S. Department of Health and Human Services & U.S. Department of Agriculture. (2015). *2015–2020 Dietary Guidelines for Americans* (8th ed.). Retrieved from https://health.gov/our-work/food-nutrition/2015-2020-dietary-guidelines

10 National Institute on Alcohol Abuse and Alcoholism. (n.d.). Drinking levels defined. Retrieved from www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

11 Centers for Disease Control and Prevention. (2018). Alcohol and Public Health. Frequently Asked Questions. Retrieved from www.cdc.gov/alcohol/faqs.htm

12 U.S. Department of Health and Human Services & U.S. Department of Agriculture. (2015). *2015–2020 Dietary Guidelines for Americans* (8th ed.). Retrieved from https://health.gov/our-work/food-nutrition/2015-2020-dietary-guidelines

13 World Health Organization. (2018). Management of substance abuse: Psychoactive substances. Retrieved from www.who.int/substance_abuse/terminology/psychoactive_substances/en/

14 American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

15 American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

16 Substance Abuse and Mental Health Services Administration. (2020). *National Survey of Substance Abuse Treatment Services (N-SSATS): 2019, Data on substance abuse treatment facilities.* Retrieved from https://wwwdasis.samhsa.gov/dasis2/nssats/NSSATS_2019/2019-NSSATS-R.pdf

17 Blazer, D. G. (2013). The Institute of Medicine report on the mental health and substance use workforce for older adults: A reflection. *American Journal of Geriatric Psychiatry, 21*(10), 1038–1042.

18 Substance Abuse and Mental Health Services Administration. (2020). *National Survey of Substance Abuse Treatment Services (N-SSATS): 2019, Data on substance abuse treatment facilities.* Retrieved from https://wwwdasis.samhsa.gov/dasis2/nssats/NSSATS_2019/2019-NSSATS-R.pdf

19 Grant, B. F., Chou, S. P., Saha, T. D., Pickering, R. P., Kerridge, B. T., Ruan, W. J., … Hasin, D. S. (2017). Prevalence of 12-month alcohol use, high-risk drinking, and DSM-IV alcohol use disorder in the United States, 2001–2002 to 2012–2013: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. *JAMA Psychiatry, 74*(9), 911–923.

[20] Han, B. H. (2018). Aging, multimorbidity, and substance use disorders: The growing case for integrating the principles of geriatric care and harm reduction. *International Journal of Drug Policy, 85,* 135–136.

[21] Gfroerer, J., Penne, M., Pemberton, M., & Folsom, R. (2003). Substance abuse treatment need among older adults in 2020: The impact of the aging baby-boom cohort. *Drug and Alcohol Dependence, 69*(2), 127–135.

[22] Institute of Medicine. (2012). *The mental health and substance use workforce for older adults: In whose hands?* Washington, DC: National Academies Press.

[23] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[24] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[25] Vincent, G. K., & Velkoff, V. A. (2010). *The next four decades: The older population in the United States: 2010 to 2050.* Washington, DC: Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau.

[26] Fox-Grage, W. (2016, April 18). The growing racial and ethnic diversity of older adults. Retrieved from https://blog.aarp.org/thinking-policy/the-growing-racial-and-ethnic-diversity-of-older-adults

[27] Gfroerer, J., Penne, M., Pemberton, M., & Folsom, R. (2003). Substance abuse treatment need among older adults in 2020: The impact of the aging baby-boom cohort. *Drug and Alcohol Dependence, 69*(2), 127–135.

[28] Wu, L.-T., & Blazer, D. G. (2011). Illicit and nonmedical drug use among older adults: A review. *Journal of Aging and Health, 23*(3), 481–504.

[29] Barry, K. L., & Blow, F. C. (2016). Drinking over the lifespan: Focus on older adults. *Alcohol Research: Current Reviews, 38*(1), 115.

[30] Davies, E. A., & O'Mahony, M. S. (2015). Adverse drug reactions in special populations: The elderly. *British Journal of Clinical Pharmacology, 80,* 796–807.

[31] Grant, B. F., Goldstein, R. B., Saha, T. D., Chou, S. P., Jung, J., Zhang, H., … Hasin, D. S. (2015). The epidemiology of DSM-5 alcohol use disorder: Results from the National Epidemiologic Survey on Alcohol and Related Conditions, III. *JAMA Psychiatry, 72,* 757–766.

[32] Grant, B. F., Saha, T. D., Ruan, W. J., Goldstein, R. B., Chou, S. P., Jung, J., … Hasin, D. S. (2016). Epidemiology of DSM-5 drug use disorder: Results from the National Epidemiologic Survey on Alcohol and Related Conditions-III. *JAMA Psychiatry, 73,* 39–47.

[33] Choi, N. G., DiNitto, D. M., & Marti, C. N. (2016). Older-adult marijuana users and ex-users: Comparisons of sociodemographic characteristics and mental and substance use disorders. *Drug and Alcohol Dependence, 165,* 94–102.

[34] Reynolds, K., Pietrzak, R. H., El-Gabalawy, R., Mackenzie, C. S., & Sareen, J. (2015). Prevalence of psychiatric disorders in U.S. older adults: Findings from a nationally representative survey. *World Psychiatry, 14*(1), 74–81.

[35] Office of the Surgeon General. (2016). *Facing addiction in America: The Surgeon General's report on alcohol, drugs, and health.* Washington, DC: Department of Health and Human Services.

[36] Whitlock, E. P., Polen, M. R., Green, C. A., Orleans, T., & Klein, J. (2004). Behavioral counseling interventions in primary care to reduce risky/harmful alcohol use by adults: A summary of the evidence for the U.S. Preventive Services Task Force. *Annals of Internal Medicine, 140*(7), 557–568.

[37] Kuerbis, A. N., Yuan, S. E., Borok, J., LeFevre, P., Kim, G. S., Lum, D., … Moore, A. A. (2015). Testing the initial efficacy of a mailed screening and brief feedback intervention to reduce at-risk drinking in middle-aged and older adults: The Comorbidity Alcohol Risk Evaluation Study. *Journal of the American Geriatrics Society, 63*(2), 321–326.

[38] Schonfeld, L., Hazlett, R. W., Hedgecock, D. K., Duchene, D. M., Burns, L. V., & Gum, A. M. (2015). Screening, brief intervention, and referral to treatment for older adults with substance misuse. *American Journal of Public Health, 105*(1), 205–211.

[39] Ettner, S. L., Xu, H., Duru, O. K., Ang, A., Tsengh C.-H., Tallen, L., … Moore, A. A. (2014). The effect of an educational intervention on alcohol consumption, at-risk drinking, and health care utilization in older adults: The Project SHARE study. *Journal of Studies on Alcohol and Drugs, 75*(3), 447–457.

[40] Satre, D. D., Mertens, J. R., Areán, P. A., & Weisner, C. (2004). Five-year alcohol and drug treatment outcomes of older adults versus middle-aged and younger adults in a managed care program. *Addiction, 99*(10), 1286–1297.

[41] Oslin, D. W., Pettinati, H., & Volpicelli, J. R., (2002). Alcoholism treatment adherence: Older age predicts better adherence and drinking outcomes. *American Journal of Geriatric Psychiatry, 10*(6), 740–747.

42 Taylor, M. H., & Grossberg, G. T. (2012). The growing problem of illicit substance abuse in the elderly: A review. *Primary Care Companion for CNS Disorders, 14*(4).

43 Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

44 National Institute on Alcohol Abuse and Alcoholism. (n.d.). What's a "standard" drink? Retrieved June 14, 2019, from www.rethinkingdrinking.niaaa.nih.gov/How-much-is-too-much/What-counts-as-a-drink/Whats-A-Standard-Drink.aspx

45 Callahan, C. M., & Tierney, W. M. (1995). Health services use and mortality among older primary care patients with alcoholism. *Journal of the American Geriatrics Society, 43*(12), 1378–1383.

46 Kirchner, J. E., Zubritsky, C., Cody, M., Coakley, E., Chen, H., Ware, J. H., … Levkoff, S. (2007). Alcohol consumption among older adults in primary care. *Journal of General Internal Medicine, 22*(1), 92–97.

47 Weyerer, S., Schäufele, M., Eifflaender-Gorfer, S., Köhler, L., Maier, W., Haller, F., … Steffi, G. (2009). At-risk alcohol drinking in primary care patients aged 75 years and older. *International Journal of Geriatric Psychiatry, 24*(12), 1376–1385.

48 Kirchner, J. E., Zubritsky, C., Cody, M., Coakley, E., Chen, H., Ware, J. H., … Levkoff, S. (2007). Alcohol consumption among older adults in primary care. *Journal of General Internal Medicine, 22*(1), 92–97.

49 Substance Abuse and Mental Health Services Administration. (2012). *Older Americans Behavioral Health Issue Brief 2: Alcohol misuse and abuse prevention* (p. 1). Retrieved from www.acl.gov/sites/default/files/programs/2016-11/Issue%20Brief%202%20Alcohol%20Misuse.pdf

50 National Institute on Alcohol Abuse and Alcoholism. (n.d.). Older adults. Retrieved from www.niaaa.nih.gov/alcohol-health/special-populations-co-occurring-disorders/older-adults

51 Bagnardi, V., Rota, M., Botteri, E., Tramacere, I., Islami, F., Scotti, L., … LaVecchia, C. (2015). Alcohol consumption and site-specific cancer risk: A comprehensive dose-response meta-analysis. *British Journal of Cancer, 112*(3), 580–593.

52 Bagnardi, V., Rota, M., Botteri, E., Tramacere, I., Islami, F., Fedirki, L., … LaVecchia, C. (2013). Light alcohol drinking and cancer: A meta-analysis. *Annals of Oncology, 24*(2), 301–308.

53 Shaw, B. A., Agahi, N., & Krause, N. (2011). Are changes in financial strain associated with changes in alcohol use and smoking among older adults? *Journal of Studies on Alcohol and Drugs, 72*(6), 917–925.

54 Sacco, P., Bucholz, K. K., & Harrington, D. (2014). Gender differences in stressful life events, social support, perceived stress, and alcohol use among older adults: Results from a national survey. *Substance Use and Misuse, 49*(4),456–465.

55 Barry, K. L., & Blow, F. C. (2016). Drinking over the lifespan: Focus on older adults. *Alcohol Research, 38*(1), 115–120.

56 Holton, A. E., Gallagher, P., Fahey, T., & Cousins, G. (2017). Concurrent use of alcohol interactive medications and alcohol in older adults: A systematic review of prevalence and associated adverse outcomes. *BMC Geriatrics, 17*(1), 148.

57 Breslow, R. A., Dong, C., & White, A. (2015). Prevalence of alcohol-interactive prescription medication use among current drinkers: United States, 1999 to 2010. *Alcoholism, Clinical and Experimental Research, 39*(2), 371–379.

58 Breslow, R. A., Dong, C., & White, A. (2015). Prevalence of alcohol-interactive prescription medication use among current drinkers: United States, 1999 to 2010. *Alcoholism, Clinical and Experimental Research, 39*(2), 371–379.

59 Moore, A. A., Whiteman, E. J., & Ward, K. T. (2007). Risks of combined alcohol/medication use in older adults. *American Journal of Geriatric Pharmacotherapy, 5*(1), 64–74.

60 National Center for Health Statistics. (2019). *Health, United States, 2018.* Retrieved from www.cdc.gov/nchs/data/hus/hus18.pdf

61 Qato, D. M., Wilder, J., Schumm, L. P., Gillet, V., & Alexander, G. C. (2016). Changes in prescription and over-the-counter medication and dietary supplement use among older adults in the United States, 2005 vs. 2011. *JAMA Internal Medicine, 176*(4), 473–482.

62 Davies, E. A., & O'Mahony, M. S. (2015). Adverse drug reactions in special populations: The elderly. *British Journal of Clinical Pharmacology, 80,* 796–807.

63 Bush, D. M. (2013). Emergency department visits for drug misuse or abuse involving the pain medication tramadol. *The CBHSQ Report.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/sites/default/files/report_1966/ShortReport-1966.html

64 Agency for Healthcare Research and Quality. (2019, September). Patient safety primer: Medication administration errors. Retrieved October 10, 2019, from https://psnet.ahrq.gov/primer/medication-administration-errors

65 Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

66 Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

67 Aira, M., Hartikainen, S., & Sulkava, R. (2008). Drinking alcohol for medicinal purposes by people aged over 75: A community-based interview study. *Family Practice, 25*(6), 445–449.

68 Levi-Minzi, M. A., Surratt, H. L., Kurtz, S. P., & Buttram, M. E. (2013). Under treatment of pain: A prescription for opioid misuse among the elderly. *Pain Medicine, 14*(11), 1719–1729.

69 Christie, M. M., Bamber, D., Powell, C., Arrindell, T., & Pant, A. (2013). Older adult problem drinkers: Who presents for alcohol treatment? *Aging and Mental Health, 17*(1), 24–32.

70 Colliver, J. D., Compton, W. M., Gfroerer, J. C., & Condon, T. (2006). Projecting drug use among aging baby boomers in 2020. *Annals of Epidemiology, 16,* 257–265.

71 Olfson, M., Wang, S., Iza, M., Crystal, S., & Blanco, C. (2013). National trends in the office-based prescription of schedule II opioids. *Journal of Clinical Psychiatry, 74*(9), 932–939.

72 Dobscha, S. K., Loveyoy, T. I., Morasco, B. J., Kovas, A. E., Peters, D. M., Hart, K., … McFarland, B. H. (2016). Predictors of improvements in pain intensity in a national cohort of older veterans with chronic pain. *Journal of Pain, 17*(7), 824–835.

73 Jones, C. M., Paulozzi, L. J., & Mack, K. A. (2014). Alcohol involvement in opioid pain reliever and benzodiazepine drug abuse-related emergency department visits and drug-related deaths: United States, 2010. *Morbidity and Mortal Weekly Report, 63*(40), 881–885.

74 Food and Drug Administration. (2017). FDA Drug Safety Communication: FDA warns about serious risks and death when combining opioid pain or cough medicines with benzodiazepines; Requires its strongest warning. Retrieved from www.fda.gov/Drugs/DrugSafety/ucm518473.htm

75 van der Schrier, R., Roozekrans, M., Olofsen, E., Aarts, L., & van Velzen, M. (2017). Influence of ethanol on oxycodone-induced respiratory depression: A dose-escalating study in young and elderly individuals. *Anesthesiology, 126*(3), 534–542.

76 Centers for Disease Control and Prevention, National Center for Health Statistics. (2020). *Multiple cause of death data 1999-2018 on CDC WONDER* [Data set]. Retrieved April 14, 2020, from https://wonder.cdc.gov/mcd.html

77 Food and Drug Administration. (2017). FDA Drug Safety Communication: *FDA urges caution about withholding opioid addiction medications from patients taking benzodiazepines or CNS depressants: Careful medication management can reduce risks.* Retrieved from www.fda.gov/drugs/drug-safety-and-availability/fda-drug-safety-communication-fda-urges-caution-about-withholding-opioid-addiction-medications

78 Maust, D. T., Kales, H. C., Wiechers, I. R., Blow, F. C., & Olfson, M. (2016). No end in sight: Benzodiazepine use in older adults in the United States. *Journal of the American Geriatrics Society, 64,* 2546–2553.

79 Woolcott, J. C., Richardson, K. J., & Wiens, M. O. (2009). Meta-analysis of the impact of 9 medication classes on falls in elderly persons. *Archives of Internal Medicine, 169*(21), 1952–1960.

80 Tannenbaum, C., Paquette, A., Hilmer, S., Holroyd-Leduc, J., & Carnahan, R. (2012). A systematic review of amnestic and non-amnestic mild cognitive impairment induced by anticholinergic, antihistamine, GABAergic, and opioid drugs. *Drugs and Aging, 29*(8), 639–658.

81 Dassanayake, T., Michie, P., Carter G., & Jones, A. (2011). Effects of benzodiazepines, antidepressants and opioids on driving. *Drug Safety, 34*(2), 125–156.

82 Jones, C. M., Mack, K. A., & Paulozzi, L. J. (2013). Pharmaceutical overdose deaths, United States, 2010. *JAMA, 309*(7), 657–659.

83 Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

84 Compton, W. M., Han, B., Hughes, A., Jones, C. M., & Blanco, C. (2017). Use of marijuana for medical purposes among adults in the United States. *JAMA, 317,* 209–211.

85 Minerbi, A., Häuser, W., & Fitzcharles, M. A. (2019). Medical cannabis for older patients. *Drugs and Aging, 36*(1), 39–51.

86 Minerbi, A., Häuser, W., & Fitzcharles, M. A. (2019). Medical cannabis for older patients. *Drugs and Aging, 36*(1), 39–51.

87 Briscoe, J., & Casarett, D. (2018). Medical marijuana use in older adults. *Journal of the American Geriatrics Society, 66,* 859–863.

88 McCance-Katz, E. F. (2019). Urgent and emerging issues in prevention: Marijuana, kratom, e-cigarettes. Retrieved from www.samhsa.gov/sites/default/files/samhsas_15th_annual_prevention_day_afternoon_plenary_recording.pdf

89 Alsherbiny, M. A., & Li, C. G. (2018). Medicinal cannabis—Potential drug interactions. *Medicines (Basel), 6*(1), 3.

90 Bolla, K. I., Brown, K., Eldreth, D., Tate, K., & Cadet, J. L. (2002). Dose-related neurocognitive effects of marijuana use. *Neurology, 59*(9), 1337–1343.

91 Hayatbakhsh, M. R., Najman, J. M., Jamrozik, K., Mamun, A. A., Alati, R., & Bor, W. (2007). Cannabis and anxiety and depression in young adults: A large prospective study. *Journal of the American Academy of Child and Adolescent Psychiatry, 46*(3), 408–417.

92 van Laar, M., van Dorsselaer, S., Monshouwer, K., & de Graaf, R. (2007). Does cannabis use predict the first incidence of mood and anxiety disorders in the adult population? *Addiction, 102*(8), 1251–1260.

93 Briscoe, J., & Casarett, D. (2018). Medical marijuana use in older adults. *Journal of the American Geriatrics Society, 66,* 859–863.

94 ElSohly, M. A., Mehmedic, Z., Foster, S., Gon, C., Chandra, S., & Church, J. C. (2016). Changes in cannabis potency over the last 2 decades (1995-2014): Analysis of current data in the United States. *Biological Psychiatry, 79*(7), 613–619.

95 Substance Abuse and Mental Health Services Administration. (2014). *Results from the 2013 National Survey on Drug Use and Health: Summary of national findings.* NSDUH Series H-48. HHS Publication No. (SMA) 14-4863. Rockville, MD: Substance Abuse and Mental Health Services Administration.

96 Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

97 Chhatre, S., Cook, R., Mallik, E., & Jayadevappa, R. (2017). Trends in substance use admissions among older adults. *BMC Health Services Research, 17*(1), 584.

98 Qato, D. M., Wilder, J., Schumm, L. P., Gillet, V., & Alexander, G. C. (2016). Changes in prescription and over-the-counter medication and dietary supplement use among older adults in the United States, 2005 vs. 2011. *JAMA Internal Medicine, 176*(4), 473–482.

99 Qato, D. M., Wilder, J., Schumm, L. P., Gillet, V., & Alexander, G. C. (2016). Changes in prescription and over-the-counter medication and dietary supplement use among older adults in the United States, 2005 vs. 2011. *JAMA Internal Medicine, 176*(4), 473–482.

100 Satre, D. D., Chi, F., Mertens, J., & Weisner, C. (2012). Effects of age and life transitions on alcohol and drug treatment outcome over nine years. *Journal of Studies on Alcohol and Drugs, 73,* 459–468.

101 Sajatovik, M., Blow, F., & Ignacio, R. V. (2006). Psychiatric comorbidity in older adults with bipolar disorder. *International Journal of Geriatric Psychiatry, 21,* 582–587.

102 Bartels, S. J., Blow, F. C., Van Citters, A. D., & Brockmann, L. M. (2006). Dual diagnosis among older adults: Co-occurring substance abuse and psychiatric illness. *Journal of Dual Diagnosis, 2*(3), 9–30.

103 Bartels, S. J., Miles, K. M., Oxman, T. E., Zimmerman, S., Cori, L. A., Pomerantz, A. S., … Mendolevicz, N. (2006). Correlates of co-occurring depressive symptoms and alcohol use in an older primary care clinic population. *Journal of Dual Diagnosis, 2*(3), 57–72.

104 Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

105 Satre, D. D., Chi, F., Mertens, J., & Weisner, C. (2012). Effects of age and life transitions on alcohol and drug treatment outcome over nine years. *Journal of Studies on Alcohol and Drugs, 73,* 459–468.

106 Satre, D. D., Chi, F., Mertens, J., & Weisner, C. (2012). Effects of age and life transitions on alcohol and drug treatment outcome over nine years. *Journal of Studies on Alcohol and Drugs, 73,* 459–468.

107 Substance Abuse and Mental Health Services Administration. (2019). *Get connected: Linking older adults with resources on medication, alcohol, and mental health.* HHS Publication No. (SMA) 03-3824. Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from https://store.samhsa.gov/product/Get-Connected-Linking-Older-Adults-with-Resources-on-Medication-Alcohol-and-Mental-Health-2019-Edition/SMA03-3824

108 Wu, L. T., & Blazer, D. G. (2011). Illicit and nonmedical drug use among older adults: A review. *Journal of Aging and Health, 23*(3), 481–504.

109 Klein, W. C., & Jess, C. (2002). One last pleasure? Alcohol use among elderly people in nursing homes. *Health and Social Work, 27*(3), 193–203.

110 Benshoff, J. J., Harrawood, L. K., & Koch, D. S. (2003). Substance abuse and the elderly: Unique issues and concerns. *Journal of Rehabilitation, 69*(2), 43.

111 Whitlock, E. P., Green, C. A., & Polen, M. R. (2004). Behavioral counseling interventions in primary care to reduce risky/harmful alcohol use by adults: A summary of the evidence for the U.S. Preventive Services Task Force. *Annals of Internal Medicine, 140*(7), 557–568.

[112] Kuerbis, A. N., Yuan, S. E., Borok, J., LeFevre, P., Kim, G. S., Lum, D., … Moore, A. A. (2015). Testing the initial efficacy of a mailed screening and brief feedback intervention to reduce at-risk drinking in middle-aged and older adults: The Comorbidity Alcohol Risk Evaluation Study. *Journal of the American Geriatrics Society, 63*(2), 321–326.

[113] Schonfeld, L.,King-Kallimanis, B. L., Duchene, D. M., Etheridge, R. L., Herrera, J. R., Barry, K. L., & Lynn, N. (2015). Screening, brief intervention, and referral to treatment for older adults with substance misuse. *American Journal of Public Health, 105*(1), 205–211.

[114] Ettner, S. L., Xu, H., Duru, O. K., Ang, A., Tseng, C.-H., Tallen, L., … Moore, A. A. (2014). The effect of an educational intervention on alcohol consumption, at-risk drinking, and health care utilization in older adults: The Project SHARE study. *Journal of Studies on Alcohol and Drugs, 75*(3), 447–457.

[115] Satre, D. D., Mertens, J. R., Areán, P. A., & Weisner, C. (2004). Five-year alcohol and drug treatment outcomes of older adults versus middle-aged and younger adults in a managed care program. *Addiction, 99*(10), 1286–1297.

[116] Oslin, D. W., Pettinati, H., & Volpicelli, J. R. (2002). Alcoholism treatment adherence: Older age predicts better adherence and drinking outcomes. *American Journal of Geriatric Psychiatry, 10*(6), 740–747.

[117] Barry, K. L., & Blow, F. C. (2016). Drinking over the lifespan: Focus on older adults. *Alcohol Research: Current Reviews, 38*(1), 115.

[118] Barry, K. L., Brockmann, L., & Blow, F. C. (2010). Brief interventions for alcohol and drug problems. In N. S. Miller & M. S. Gold (Eds.), *Addictive disorders in medical populations* (pp. 557–573). Hoboken, NJ: Wiley-Blackwell.

[119] Schonfeld, L. Hazlett, R. W., Hedgecock, D. K., Duchene, D. M., Burns, L. V., & Gum, A. M. (2015). Screening, brief intervention, and referral to treatment for older adults with substance misuse. *American Journal of Public Health, 105*(1), 205–211.

[120] Barry, K., & Fleming, M. (1990). Computerized administration of alcoholism screening tests in a primary care setting. *Journal of the American Board of Family Practice, 3*(2), 93–98.

[121] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[122] Gfroerer, J., Penne, M., Pemberton, M., & Folsom, R. (2003). Substance abuse treatment need among older adults in 2020: The impact of the aging baby-boom cohort. *Drug and Alcohol Dependence, 69*(2), 127–135.

[123] Chhatre, S., Cook, E., Mallik, E., & Jayadevappa, R. (2017). Trends in substance use admissions among older adults. *BMC Health Services Research, 17*(1), 584.

[124] Chhatre, S., Cook, E., Mallik, E., & Jayadevappa, R. (2017). Trends in substance use admissions among older adults. *BMC Health Services Research, 17*(1), 584.

[125] Barry, K. L., & Blow, F. C. (2016). Drinking over the lifespan: Focus on older adults. *Alcohol Research, 38*(1), 115–120.

[126] Babatunde, O. T., Outlaw, K. R., Forbe, B., & Gay, T. (2014). Revisiting baby boomers and alcohol use: Emerging treatment trends. *Journal of Human Behavior in the Social Environment, 24,* 597–611.

[127] Kinney, J. (2011). *Loosening the grip: A handbook of alcohol information* (10th ed.). Boston, MA: McGraw-Hill.

[128] Bommersbach, T. J., Lapid, M. A., Rumman, T. A., & Morse, R. M. (2015). Geriatric alcohol use disorder: A review for primary care physicians. *Mayo Clinic Proceedings, 90*(5), 659–666.

[129] Babatunde, O. T., Outlaw, K. R., Forbe, B., & Gay, T. (2014). Revisiting baby boomers and alcohol use: Emerging treatment trends. *Journal of Human Behavior in the Social Environment, 24,* 597–611.

[130] Jonas, D. E., Amick, H. R., Feltner, C., Bobashev, G., Thomas, K., Wines, R., … Garbutt, J. C. (2014). Pharmacotherapy for adults with alcohol use disorders in outpatient settings: A systematic review and meta-analysis. *JAMA, 311*(18), 1889–1900.

[131] Winslow, B. T., Onysko, M., & Hebert, M. (2016). Medications for alcohol use disorder. *American Family Physician, 93*(6), 457–465.

[132] Witkiewitz, K., Saville, K., & Hamreus, K. (2012). Acamprosate for treatment of alcohol dependence: Mechanisms, efficacy, and clinical utility. *Therapeutics and Clinical Risk Management, 8,* 45–53.

[133] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[134] Mooney, L. J., & McCance-Katz, E. F. (2016). Psychopharmacological treatments. In A. H. Mack, K. T. Brady, S. I., Miller, & R. F. Frances (Eds.), *Clinical textbook of addictive disorders* (4th ed., pp. 668–694). New York, NY: Guilford Press.

[135] Substance Abuse and Mental Health Services Administration & National Institute on Alcohol Abuse and Alcoholism. (2015). *Medication for the treatment of alcohol use disorder: A brief guide.* HHS Publication No. (SMA) 15-4907. Retrieved from https://store.samhsa.gov/product/Medication-for-the-Treatment-of-Alcohol-Use-Disorder-A-Brief-Guide/SMA15-4907

[136] Winslow, B. T., Onysko, M., & Hebert, M. (2016). Medications for alcohol use disorder. *American Family Physician, 93*(6), 457–465.

[137] Mooney, L. J., & McCance-Katz, E. F. (2016). Psychopharmacological treatments. In A. H. Mack, K. T. Brady, S. I., Miller, & R. F. Frances (Eds.), *Clinical textbook of addictive disorders* (4th ed., pp. 668–694). New York, NY: Guilford Press.

[138] Hassell, C., Wilkins, K., & Trevisan, L. A. (2017). Pharmacology of geriatric substance use disorders: Considerations and future directions. *Current Treatment Options in Psychiatry, 4*(1), 102–115.

[139] Le Roux, C., Tang, Y., & Drexler, K. (2016). Alcohol and opioid use disorder in older adults: Neglected and treatable illnesses. *Current Psychiatry Reports, 18,* 87.

[140] Lal, R., & Pattanayak, R. D. (2017). Alcohol use among the elderly: Issues and considerations. *Journal of Geriatric Mental Health, 4*(1), 4–10.

[141] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[142] Skinner, M. D., Lahmek, P., Pham, H., & Aubin, H. J. (2014). Disulfiram efficacy in the treatment of alcohol dependence: A meta-analysis. *PLoS One, 9*(2), e87366. doi:10.1371/journal.pone.0087366

[143] Winslow, B. T., Onysko, M., & Hebert, M. (2016). Medications for alcohol use disorder. *American Family Physician, 93*(6), 457–465.

[144] Sinclair, J., Chambers, S., Shiles, C., & Baldwin, D. S. (2016). Safety and tolerability of pharmacological treatment of alcohol dependence: Comprehensive review of evidence. *Drug Safety, 39,* 627–645.

[145] Connery, H. S. (2015). Medication-assisted treatment of opioid use disorder: Review of the evidence and future directions. *Harvard Review of Psychiatry, 23*(2), 63–75.

[146] Substance Abuse and Mental Health Services Administration. (2020). *Medications for opioid use disorder.* Treatment Improvement Protocol (TIP) Series 63. Publication No. PEP20-02-01-006. Rockville, MD: Substance Abuse and Mental Health Services Administration.

[147] Substance Abuse and Mental Health Services Administration. (2020). *Medications for opioid use disorder.* Treatment Improvement Protocol (TIP) Series 63. Publication No. PEP20-02-01-006. Rockville, MD: Substance Abuse and Mental Health Services Administration.

[148] Oslin, D., Liberto, J. G., O'Brien, J., & Krois, S. (1997). Tolerability of naltrexone in treating older, alcohol-dependent patients. *American Journal on Addictions, 6*(3), 266–270.

[149] Oslin, D., Liberto, J. G., O'Brien, J., Krois, S., & Norbeck, J. (1997). Naltrexone as an adjunctive treatment for older patients with alcohol dependence. *American Journal of Geriatric Psychiatry, 5*(4), 324–332.

[150] World Health Organization. (2017). *WHO model list of essential medications.* Retrieved from https://apps.who.int/iris/bitstream/handle/10665/273826/EML-20-eng.pdf?ua=1

[151] Herget, G. (2005). Methadone and buprenorphine added to the WHO list of essential medicines. *HIV/AIDS Policy and Law Review, 10*(3), 23–24.

[152] Joshi, P., Shah, N. K., & Kirane, H. D. (2019). Medication-assisted treatment for opioid use disorder in older adults: An emerging role for the geriatric psychiatrist. *American Journal of Geriatric Psychiatry, 27*(4), 455–457.

[153] Karp, J. F., Butters, M. A., Begley, A. E., Miller, M. D., Lenze, E. J., Blumberger, D. M., … Reynolds, C. F., III. (2014). Safety, tolerability, and clinical effect of low-dose buprenorphine for treatment-resistant depression in midlife and older adults. *Journal of Clinical Psychiatry, 75*(8), e785–e793.

[154] Purdue Pharma L.P. (2017). Advisory Committee briefing materials for Joint Meeting of the Anesthetic and Analgesic Drug Products Advisory Committee and Drug Safety and Risk Management Advisory Committee. Retrieved from www.fda.gov/media/107620/download

[155] Pergolizzi, J. V., Raffa, R. B., Marcum, Z., Colucci, S., & Ripa, S. R. (2017). Safety of buprenorphine transdermal system in the management of pain in older adults. *Postgraduate Medicine, 129*(1), 92–101.

[156] Substance Abuse and Mental Health Services Administration. (2020). *Medications for opioid use disorder.* Treatment Improvement Protocol (TIP) Series 63. Publication No. PEP20-02-01-006. Rockville, MD: Substance Abuse and Mental Health Services Administration.

[157] World Health Organization. (2017). *WHO model list of essential medications.* Retrieved from https://apps.who.int/iris/bitstream/handle/10665/273826/EML-20-eng.pdf?ua=1

[158] Herget, G. (2005). Methadone and buprenorphine added to the WHO list of essential medicines. *HIV/AIDS Policy and Law Review, 10*(3), 23–24.

[159] Sullivan, M., & Levin, F. (2016). *Addiction in the older patient.* New York, NY: Oxford University Press.

[160] Abdulla, A., Adams, N., Bone, M., Elliott, A. M., Gaffin, J., … Schofield, P. (2013). Guidance on management of pain in older people. *Age and Ageing, 42,* i1–i57.

[161] Malec, M., & Shega, J. W. (2015). Pain management in the elderly. *Medical Clinics of North America, 99*(2), 337–350.

[162] Gallagher, R. (2009). Methadone: An effective, safe drug of first choice for pain management in frail older adults. *Pain Medicine, 10*(2), 319–326.

[163] Martin, J. A., Campbell, A., Killip, T., Kotz, M., Krantz, M. J., Kreek, M. J., … Substance Abuse and Mental Health Services Administration. (2011). QT interval screening in methadone maintenance treatment: Report of a SAMHSA expert panel. *Journal of Addictive Diseases, 30*(4), 283–306.

[164] Vu Bach, T., Pan, J., Kirstein, A., Grief, C. J., & Grossman, D. (2016). Use of methadone as an adjuvant medication to low-dose opioids for neuropathic pain in the frail elderly: A case series. *Journal of Palliative Medicine, 19*(12), 1351–1355.

[165] Lehn, J. M., & Pinderhughes, S. T. (2017, January). Methadone for treating pain in older adults. *Elder Care.* Retrieved from www.uofazcenteronaging.com/sites/default/files/methadone_for_treatment_of_pain.pdf

[166] World Health Organization. (2017). *WHO model list of essential medications.* Retrieved from https://apps.who.int/iris/bitstream/handle/10665/273826/EML-20-eng.pdf?ua=1

[167] Chau, D. L., Walker, V., Pai, L., & Cho, L. M. (2008). Opiates and elderly: Use and side effects. *Clinical Interventions in Aging, 3*(2), 273–278.

[168] Satre, D. D., Mertens, J. R., Areán, P. A., & Weisner, C. (2004). Five-year alcohol and drug treatment outcomes of older adults versus middle-aged and younger adults in a managed care program. *Addiction, 99*(10), 1286–1297.

[169] Oslin, D. W., Pettinati, H., & Volpicelli, J. R. (2002). Alcoholism treatment adherence: Older age predicts better adherence and drinking outcomes. *American Journal of Geriatric Psychiatry, 10*(6), 740–747.

[170] Kuerbis, A., & Sacco, P. (2013). A review of existing treatments for substance abuse among the elderly and recommendations for future directions. *Substance Abuse: Research and Treatment, 7,* 13–37.

[171] Lemke, S., & Moos, R. H. (2003). Treatment and outcomes of older patients with alcohol use disorders in community residential programs. *Journal of Studies on Alcohol, 64*(2), 219–226.

[172] Substance Abuse and Mental Health Services Administration. (2020). *National Survey of Substance Abuse Treatment Services (N-SSATS): 2019, Data on substance abuse treatment facilities.* Retrieved from https://wwwdasis.samhsa.gov/dasis2/nssats/NSSATS_2019/2019-NSSATS-R.pdf

[173] Shutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2014). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. Rao, & P. Crome (Eds.), *Substance use and older people.* West Sussex, UK: Wiley-Blackwell.

[174] D'Agostino, C. S., Blow, F. C., Barry, K., & Podgorski, C. (2006). Community interventions for older adults with comorbid substance abuse: The Geriatric Addictions Program (GAP). *Journal of Dual Diagnosis, 2*(3), 31–45.

[175] Schonfeld, L., Hazlett, R. W., Hedgecock, D. K., Duchene, D. M., Burns, L. V., & Gum, A. M. (2015). Screening, brief intervention, and referral to treatment for older adults with substance misuse. *American Journal of Public Health, 105*(1), 205–211.

[176] Han, B. H., Masukawa, K., Rosenbloom, D., Kuerbis, A., Helmuth, E., Liao, D. H., & Moore, A. A. (2018). Use of web-based screening and brief intervention for unhealthy alcohol use by older adults. *Journal of Substance Abuse Treatment, 86,* 70.

[177] Choi, N. G., DiNitto, D. M., & Marti, N. C. (2014). Treatment use, perceived need, and barriers to seeking treatment for substance abuse and mental health problems among older adults compared to younger adults. *Drug and Alcohol Dependence, 145,* 113–120.

[178] Blais, R. K., Tsai, J., Southwick, S. M., & Pietrzak, R. H. (2015). Barriers and facilitators related to mental health care use among older veterans in the United States. *Psychiatric Services, 66*(5), 500–506.

[179] Crome, I. (2013). Substance misuse in the older person: Setting higher standards. *Clinical Medicine (London), 13*(Suppl. 6), s46–s49.

[180] Royal College of Psychiatrists. (2015). *Substance misuse in older people: An information guide.* Older Persons' Substance Misuse Working Group faculty report. Retrieved from www.researchgate.net/publication/278779731_Substance_misuse_in_Older_People_an_information_guide

[181] Crome, I. (2013). Substance misuse in the older person: Setting higher standards. *Clinical Medicine (London), 13*(Suppl. 6), s46–s49.

[182] Substance Abuse and Mental Health Services Administration. (2020). *National Survey of Substance Abuse Treatment Services (N-SSATS): 2019, Data on substance abuse treatment facilities.* Retrieved from https://wwwdasis.samhsa.gov/dasis2/nssats/NSSATS_2019/2019-NSSATS-R.pdf

[183] Priester, M. A., Browne, T., Iachini, A., Clone, S., DeHart, D., & Seay, K. D. (2016). Treatment access barriers and disparities among individuals with co-occurring mental health and substance use disorders: An integrative literature review. *Journal of Substance Abuse Treatment, 61,* 47–59.

[184] Sacco, P., & Kuerbis, A. (2013). Older adults. In M. G. Vaughn & B. E. Perron (Eds.), *Social work practice in the addictions.* New York, NY: Springer.

[185] Borok, J., Galier, P., Dinolfo, M., Welgreen, S., Hoffing, M., Davis, J. W., … Moore, A. A. (2013). Why do older unhealthy drinkers decide to make changes or not in their alcohol consumption? Data from the Healthy Living as You Age study. *Journal of the American Geriatrics Society, 61*(8), 1296–1302.

[186] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

187 Royal College of Psychiatrists. (2015). *Substance misuse in older people: An information guide.* Older Persons' Substance Misuse Working Group faculty report. Retrieved from www.researchgate.net/publication/278779731_Substance_misuse_in_Older_People_an_information_guide

188 Briggs, W., Magnus, V., Lassiter, P., Patterson, A., & Smith, L. (2011). Substance use, misuse, and abuse among older adults: Implications for clinical mental health counselors. *Journal of Mental Health Counseling, 33*(2), 112–127.

189 Royal College of Psychiatrists. (2015). Substance misuse in older people: An information guide. Older Persons' Substance Misuse Working Group faculty report. Retrieved through www.researchgate.net/publication/278779731_Substance_misuse_in_Older_People_an_information_guide

190 Chrisler, J. C., Barney, A., & Palatino, B. (2016). Ageism can be hazardous to women's health: Ageism, sexism, and stereotypes of older women in the healthcare system. *Journal of Social Issues, 72*(1), 86–104.

191 Royal College of Psychiatrists. (2015). Substance misuse in older people: An information guide. Older Persons' Substance Misuse Working Group faculty report. Retrieved through www.researchgate.net/publication/278779731_Substance_misuse_in_Older_People_an_information_guide

192 Choi, N. G., DiNitto, D. M., & Marti, N. C. (2014). Treatment use, perceived need, and barriers to seeking treatment for substance abuse and mental health problems among older adults compared to younger adults. *Drug and Alcohol Dependence, 145*, 113–120.

193 Osborn, R., Doty, M. M., Moulds, D., Sarnak, D. O., & Shah, A. (2017). Older Americans were sicker and faced more financial barriers to health care than counterparts in other countries. *Health Affairs (Millwood), 36*(12), 2123–2132.

194 Choi, N. G., DiNitto, D. M., & Marti, N. C. (2014). Treatment use, perceived need, and barriers to seeking treatment for substance abuse and mental health problems among older adults compared to younger adults. *Drug and Alcohol Dependence, 145*, 113–120.

195 Hadley Strout, E., Fox, L., Castro, A., Haroun, P., Leavitt, B., Ross, C., … Carney, J. K. (2016). Access to transportation for Chittenden County Vermont older adults. *Aging Clinical and Experimental Research, 28*(4), 769–774.

196 Castle, N., Wagner, L., Ferguson-Rome, J., Smith, M., & Handler, S. (2012). Alcohol misuse and abuse reported by nurse aides in assisted living. *Research on Aging, 34*(3), 321–336.

197 Klein, W. C., & Jess, C. (2002). One last pleasure? Alcohol use among elderly people in nursing homes. *Health and Social Work, 27*(3), 193-203.

198 White, J. B., Duncan, D. F., Burr, D., Nicholson, B. T., Bonaguro, J., & Abrahamson, K. (2015). Substance abuse policies in long-term care facilities: A survey with implications for education of long-term care providers. *Educational Gerontology, 41*(7), 519–526.

199 Moos, R. H., Schutte, K. K., Brennan, P. L., & Moos, B. S. (2011). Personal, family and social functioning among older couples concordant and discordant for high-risk alcohol consumption. *Addiction, 106*(2), 324–334.

200 Bremer, D., Inhestern, L., & von dem Knesebeck, O. (2017). Social relationships and physician utilization among older adults: A systematic review. *PLoS One, 12*(9), e0185672. https://doi.org/10.1371/journal.pone.0185672

201 Graham, C. L., Scharlach, A. E., & Price Wolf, J. (2014). The impact of the "Village" model on health, well-being, service access, and social engagement of older adults. *Health Education Behavior, 41*(Suppl. 1), 91S–97S.

202 Institute of Medicine. (2012). *The mental health and substance use workforce for older adults: In whose hands?* Washington, DC: National Academies Press.

203 Bartels, S. J., Pepin, R., & Gill, L. E. (2014). The paradox of scarcity in a land of plenty: Meeting the needs of older adults with mental health and substance use disorders. *Generations, 38*(3), 6–13.

204 Institute of Medicine. (2012). *The mental health and substance use workforce for older adults: In whose hands?* Washington, DC: National Academies Press.

205 Gage, S., & Melillo, K. D. (2011). Substance abuse in older adults: Policy issues. *Journal of Gerontology Nursing, 37*(12), 8–11.

206 Institute of Medicine. (2012). *The mental health and substance use workforce for older adults: In whose hands?* Washington, DC: National Academies Press.

207 National Research Council. (2006). When I'm 64. In L. L. Carstensen & C. R. Hartel (Eds.), Motivation and behavior change. Committee on Aging Frontiers in Social Psychology, Personality, and Adult Developmental Psychology. Board on Behavioral, Cognitive, and Sensory Sciences, Division of Behavioral and Social Sciences and Education. Washington, DC: National Academies Press.

208 Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

209 Stahl, S. T., & Schulz, R. (2014). Changes in routine health behaviors following late-life bereavement: A systematic review. *Journal of Behavioral Medicine, 37*(4), 736–755.

210 Kelly, S., Olanrewaju, O., Cowan, A., Brayne, C., & Lafortune, L. (2018). Alcohol and older people: A systematic review of barriers, facilitators and context of drinking in older people and implications for intervention design. *PLoS One, 13*(1), e0191189.

211 Levy, H., & Janke, A. (2016). Health literacy and access to care. *Journal of Health Communication, 21*(Suppl. 1), 43–50.

212 Geboers, B., Reijneveld, S. A., Jansen, C. J. M., & de Winter, A. F. (2016). Health literacy is associated with health behaviors and social factors among older adults: Results from the LifeLines Cohort Study. *Journal of Health Communication, 21*(Suppl. 2), 45–53.

213 Findley, A. (2015). Low health literacy and older adults: Meanings, problems, and recommendations for social work. *Social Work in Health Care, 54*(1), 65–81.

214 Royal College of Psychiatrists. (2015). Substance misuse in older people: An information guide. Older Persons' Substance Misuse Working Group faculty report. Retrieved through www.researchgate.net/publication/278779731_Substance_misuse_in_Older_People_an_information_guide

215 Barrio, C., Palinkas, L. A., Yamada, A. M., Fuentes, D., Criado, V., Garcia, P., & Jeste, D. V. (2008). Unmet needs for mental health services for Latino older adults: Perspectives from consumers, family members, advocates, and service providers. *Community Mental Health Journal, 44*(1), 57–74.

216 Jimenez, D. E., Bartels, S. J., Cardenas, V., & Alegria, M. (2013). Stigmatizing attitudes toward mental illness among racial/ethnic older adults in primary care. *International Journal of Geriatric Psychiatry, 28*(10), 1061–1068.

217 De Guzman, E., Woods-Giscombe, C. L., & Beeber, L. S. (2015). Barriers and facilitators of Hispanic older adult mental health service utilization in the USA. *Issues in Mental Health Nursing, 36*(1), 11–20.

218 Barrio, C., Palinkas, L. A., Yamada, A. M., Fuentes, D., Criado, V., Garcia, P., & Jeste, D. V. (2008). Unmet needs for mental health services for Latino older adults: Perspectives from consumers, family members, advocates, and service providers. *Community Mental Health Journal, 44*(1), 57–74.

219 Sorkin, D. H., Murphy, M., Nguyen, H., & Biegler, K. A. (2016). Barriers to mental health care for an ethnically and racially diverse sample of older adults. *Journal of the American Geriatrics Society, 64*(10), 2138–2143.

220 Auldridge, A., Tamar-Mattis, A., Kennedy, S., Ames, E., & Tobin, H. J. (2012). *Improving the lives of transgender older adults: Recommendations for policy and practice.* Services and Advocacy for GLBT Elders and the National Center for Transgender Equality. Retrieved from https://transequality.org/issues/resources/improving-lives-transgender-older-adults-full-report

221 Koenig, T. L., & Crisp, C. (2008). Ethical issues in practice with older women who misuse substances. *Substance Use and Misuse, 43*(8–9), 1045–1061.

222 Chrisler, J. C., Barney, A., & Palatino, B. (2016). Ageism can be hazardous to women's health: Ageism, sexism, and stereotypes of older women in the healthcare system. *Journal of Social Issues, 72*(1), 86–104.

223 National Institute on Alcohol Abuse and Alcoholism. (n.d.). Drinking levels defined. Retrieved from www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

224 U.S. Department of Health and Human Services & U.S. Department of Agriculture. (2015). *2015–2020 Dietary Guidelines for Americans* (8th ed.). Retrieved from https://health.gov/our-work/food-nutrition/2015-2020-dietary-guidelines

225 National Institute on Alcohol Abuse and Alcoholism. (n.d.). Drinking levels defined. Retrieved from www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

226 Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

227 Kaiser Permanente. (2019). Alcohol use in older adults. Retrieved from https://wa.kaiserpermanente.org/healthAndWellness/index.jhtml?item=%2Fcommon%2FhealthAndWellness%2FhealthyLiving%2Flifestyle%2Falcohol-seniors.html

228 Family Caregiver Alliance. (2019, April 17). Caregiver statistics: Demographics. Retrieved from www.caregiver.org/caregiver-statistics-demographics

229 Drugs.com. (2018). What are drug interactions? Retrieved August 27, 2018, from www.drugs.com/drug_interactions.html

230 Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

231 U.S. Department of Health and Human Services & U.S. Department of Agriculture. (2015). *2015–2020 Dietary Guidelines for Americans* (8th ed.). Retrieved from https://health.gov/our-work/food-nutrition/2015-2020-dietary-guidelines

232 National Institute on Alcohol Abuse and Alcoholism. (n.d.). Drinking levels defined. Retrieved from www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

233 Centers for Disease Control and Prevention. (2018). Alcohol and Public Health. Frequently Asked Questions. Retrieved from www.cdc.gov/alcohol/faqs.htm

[234] U.S. Department of Health and Human Services & U.S. Department of Agriculture. (2015). *2015–2020 Dietary Guidelines for Americans* (8th ed.). Retrieved from https://health.gov/our-work/food-nutrition/2015-2020-dietary-guidelines

[235] American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

[236] American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

[237] Moy, I., Crome, P., Crome, I., & Fisher, M. (2011). Systematic and narrative review of treatment for older people with substance problems. *European Geriatric Medicine, 2*(4), 212–236.

[238] Satre, D. D. (2015). Alcohol and drug use problems among older adults. *Clinical Psychology: Science and Practice, 22*(3), 238–254.

[239] Rothrauff, T. C., Abraham, A. J., Bride, B. E., & Roman, P. M. (2011). Substance abuse treatment for older adults in private centers. *Substance Abuse, 32*(1), 7–15.

[240] Substance Abuse and Mental Health Services Administration. (2020). *National Survey of Substance Abuse Treatment Services (N-SSATS): 2019, Data on substance abuse treatment facilities.* Retrieved from https://wwwdasis.samhsa.gov/dasis2/nssats/NSSATS_2019/2019-NSSATS-R.pdf

[241] Benshoff, J. J., Harrawood, L. K., & Koch, D. S. (2003). Substance abuse and the elderly: Unique issues and concerns. *Journal of Rehabilitation, 69*(2), 43–48.

[242] Babatunde, O. T., Outlaw, K. R., Forbes, B., & Gay, T. (2014). Revisiting baby boomers and alcohol use: Emerging treatment trends. *Journal of Human Behavior in the Social Environment, 24*(5), 597–611.

[243] National Evaluation Data Services. (2002). *Substance abuse among aging adults: A literature review.* Rockville, MD: Center for Substance Abuse Treatment. Retrieved from www.readkong.com/page/substance-abuse-among-aging-adults-a-literature-review-5220038

[244] Rothrauff, T. C., Abraham, A. J., Bride, B. E., & Roman, P. M. (2011). Substance abuse treatment for older adults in private centers. *Substance Abuse, 32*(1), 7–15.

[245] Rothrauff, T. C., Abraham, A. J., Bride, B. E., & Roman, P. M. (2011). Substance abuse treatment for older adults in private centers. *Substance Abuse, 32*(1), 7–15.

[246] Substance Abuse and Mental Health Services Administration. (2014). *Improving cultural competence.* Treatment Improvement Protocol (TIP) Series 59. HHS Publication No. (SMA) 14-4849. Rockville, MD: Substance Abuse and Mental Health Services Administration.

[247] American Psychological Association, Committee on Aging. (2009). *Multicultural competency in geropsychology.* Washington, DC: American Psychological Association. Retrieved from www.apa.org/pi/aging/programs/pipeline/multicultural-competency.pdf

[248] American Psychological Association, Committee on Aging. (2009). *Multicultural competency in geropsychology.* Washington, DC: American Psychological Association. Retrieved from www.apa.org/pi/aging/programs/pipeline/multicultural-competency.pdf

[249] American Psychological Association, Committee on Aging. (2009). *Multicultural competency in geropsychology.* Washington, DC: American Psychological Association. Retrieved from www.apa.org/pi/aging/programs/pipeline/multicultural-competency.pdf

[250] American Psychological Association, Committee on Aging. (2009). *Multicultural competency in geropsychology.* Washington, DC: American Psychological Association. Retrieved from www.apa.org/pi/aging/programs/pipeline/multicultural-competency.pdf

[251] Shutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2014). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. Rao, & P. Crome (Eds.), *Substance use and older people.* West Sussex, UK: Wiley-Blackwell.

[252] Shutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2014). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. Rao, & P. Crome (Eds.), *Substance use and older people.* West Sussex, UK: Wiley-Blackwell.

[253] American Psychological Association, Committee on Aging. (2009). *Multicultural competency in geropsychology.* Washington, DC: American Psychological Association. Retrieved from www.apa.org/pi/aging/programs/pipeline/multicultural-competency.pdf

[254] Fung, H. H. (2013). Aging in culture. *Gerontologist, 53*(3), 369–377.

[255] Fung, H. H. (2013). Aging in culture. *Gerontologist, 53*(3), 369–377.

[256] Babatunde, O. T., Outlaw, K. R., Forbes, B., & Gay, T. (2014). Revisiting baby boomers and alcohol use: Emerging treatment trends. *Journal of Human Behavior in the Social Environment, 24*(5), 597–611.

[257] Sahker, E., Schultz, S. K., & Arndt, S. (2015). Treatment of substance use disorders in older adults: Implications for care delivery. *Journal of the American Geriatrics Society, 63*(11), 2317–2323.

[258] Barry, K. L., & Blow, F. C. (2016). Drinking over the lifespan: Focus on older adults. *Alcohol Research, 38*(1), 115–120.

[259] Barry, K. L., & Blow, F. C. (2016). Drinking over the lifespan: Focus on older adults. *Alcohol Research, 38*(1), 115–120.

[260] Kuerbis, A. N., Yuan, S. E., Borok, J., LeFevre, P. M., Kim, G. S., Lum, D., … Moore, A. A. (2015). Testing the initial efficacy of a mailed screening and brief feedback intervention to reduce at-risk drinking in middle-aged and older adults: The Comorbidity Alcohol Risk Evaluation Study. *Journal of the American Geriatrics Society, 63*(2), 321–326.

[261] Schonfeld, L., Hazlett, R. W., Hedgecock, D. K., Duchene, D. M., Burns, L. V., & Gum, A. M. (2015). Screening, brief intervention, and referral to treatment for older adults with substance misuse. *American Journal of Public Health, 105*(1), 205–211. doi:10.2105/AJPH.2013.301859

[262] Lin, J. C., Karno, M. P., Barry, K. L., Blow, F. C., Davis, J. W., Tang, L., & Moore, A. A. (2010). Determinants of early reductions in drinking in older at-risk drinkers participating in the intervention arm of a trial to reduce at-risk drinking in primary care. *Journal of the American Geriatrics Society, 58*(2), 227–233.

[263] Gordon, A. J., Conigliaro, J., Maisto, S. A., McNeil, M., Kraemer, K. L., & Kelley, M. E. (2003). Comparison of consumption effects of brief interventions for hazardous drinking elderly. *Substance Use and Misuse, 38*(8), 1017–1035.

[264] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

[265] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

[266] Schonfeld, L., King-Kallimanis, B. L., Duchene, D. M., Etheridge, R. L., Herrera, J. R., Barry, K. L., & Lynn, N. (2010). Screening and brief intervention for substance misuse among older adults: The Florida BRITE Project. *American Journal of Public Health, 100*(1), 108–114.

[267] American Geriatrics Society Consensus Panel on Person-Centered Care. (2016). Person-centered care: A definition and essential elements. *Journal of the American Geriatrics Society, 64*(1), 15–18.

[268] American Geriatrics Society Consensus Panel on Person-Centered Care. (2016). Person-centered care: A definition and essential elements. *Journal of the American Geriatrics Society, 64*(1), 15–18.

[269] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

[270] Kuerbis, A., & Sacco, P. (2013). A review of existing treatments for substance abuse among the elderly and recommendations for future directions. *Substance Abuse, 7*, 13–37.

[271] Horvath, A. O., Del Re, A., Flückiger, C., & Symonds, D. (2011). Alliance in individual psychotherapy. In J. C. Norcross (Ed.), *Psychotherapy relationships that work* (2nd ed.). New York, NY: Oxford University Press.

[272] Horvath, A. O., Del Re, A., Flückiger, C., & Symonds, D. (2011). Alliance in individual psychotherapy. In J. C. Norcross (Ed.), *Psychotherapy relationships that work* (2nd ed.). New York, NY: Oxford University Press.

[273] Kuerbis, A., & Sacco, P. (2013). A review of existing treatments for substance abuse among the elderly and recommendations for future directions. *Substance Abuse, 7*, 13–37.

[274] Kuerbis, A., & Sacco, P. (2013). A review of existing treatments for substance abuse among the elderly and recommendations for future directions. *Substance Abuse, 7*, 13–37.

[275] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[276] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[277] Satre, D. D., Chi, F. W., Mertens, J. R., & Weisner, C. M. (2012). Effects of age and life transitions on alcohol and drug treatment outcome over nine years. *Journal of Studies on Alcohol and Drugs, 73*(3), 459–468.

[278] Nicholson, N. R. (2012). A review of social isolation: An important but underassessed condition in older adults. *Journal of Primary Prevention, 33*(2–3), 137–152.

[279] Mannes, Z. L., Burrell, L. E., Bryant, V. E., Dunne, E. M., Hearn, L. E., & Whitehead, N. E. (2016). Loneliness and substance use: The influence of gender among HIV+ Black/African American adults 50+. *AIDS Care, 28*(5), 598–602.

[280] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[281] McCrady, B. S. (2006). Family and other close relationships. In W. R. Miller & K. M. Carroll (Eds.), *Rethinking substance abuse: What the science shows, and what we should do about it* (pp. 166–181). New York, NY: Guilford Press.

[282] National Academies of Sciences, Engineering, and Medicine. (2016). *Families caring for an aging America.* Washington, DC: National Academies Press.

[283] National Academies of Sciences, Engineering, and Medicine. (2016). *Families caring for an aging America.* Washington, DC: National Academies Press.

[284] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

[285] Substance Abuse and Mental Health Services Administration. (2014). *Improving cultural competence.* Treatment Improvement Protocol (TIP) Series 59. HHS Publication No. (SMA) 14-4849. Rockville, MD: Substance Abuse and Mental Health Services Administration.

[286] Substance Abuse and Mental Health Services Administration. (2014). *Improving cultural competence.* Treatment Improvement Protocol (TIP) Series 59. HHS Publication No. (SMA) 14-4849. Rockville, MD: Substance Abuse and Mental Health Services Administration.

[287] Institute of Medicine. (2012). *The mental health and substance use workforce for older adults: In whose hands?* Washington, DC: National Academies Press.

[288] Kuerbis, A., Sacco, P., Blazer, D., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30,* 629–654.

[289] Office of the Surgeon General. (2016). *Facing addiction in America: The Surgeon General's report on alcohol, drugs, and health.* Washington, DC: Department of Health and Human Services.

[290] Schulte, M. T., & Hser, Y. I. (2014). Substance use and associated health conditions throughout the lifespan. *Public Health Reviews, 35*(2), ii.

[291] Institute of Medicine. (2012). *The mental health and substance use workforce for older adults: In whose hands?* Washington, DC: National Academies Press.

[292] National Institute on Alcohol Abuse and Alcoholism. (n.d.). Drinking levels defined. Retrieved from www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

[293] U.S. Department of Health and Human Services & U.S. Department of Agriculture. (2015). *2015–2020 Dietary Guidelines for Americans* (8th ed.). Retrieved from https://health.gov/our-work/food-nutrition/2015-2020-dietary-guidelines

[294] National Institute on Alcohol Abuse and Alcoholism. (n.d.). Drinking levels defined. Retrieved from www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

[295] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[296] Kaiser Permanente. (2019). Alcohol use in older adults. Retrieved from https://wa.kaiserpermanente.org/healthAndWellness/index.jhtml?item=%2Fcommon%2FhealthAndWellness%2FhealthyLiving%2Flifestyle%2Falcohol-seniors.html

[297] Family Caregiver Alliance. (2019, April 17). Caregiver statistics: Demographics. Retrieved from www.caregiver.org/caregiver-statistics-demographics

[298] Drugs.com. (2018). What are drug interactions? Retrieved August 27, 2018, from www.drugs.com/drug_interactions.html

[299] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[300] U.S. Department of Health and Human Services & U.S. Department of Agriculture. (2015). *2015–2020 Dietary Guidelines for Americans* (8th ed.). Retrieved from https://health.gov/our-work/food-nutrition/2015-2020-dietary-guidelines

[301] National Institute on Alcohol Abuse and Alcoholism. (n.d.). Drinking levels defined. Retrieved from www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

[302] Centers for Disease Control and Prevention. (2018). Alcohol and Public Health. Frequently Asked Questions. Retrieved from www.cdc.gov/alcohol/faqs.htm

[303] U.S. Department of Health and Human Services & U.S. Department of Agriculture. (2015). *2015–2020 Dietary Guidelines for Americans* (8th ed.). Retrieved from https://health.gov/our-work/food-nutrition/2015-2020-dietary-guidelines

[304] World Health Organization. (2018). Management of substance abuse: Psychoactive substances. Retrieved August 27, 2018, from www.who.int/substance_abuse/terminology/psychoactive_substances/en/

[305] American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

[306] American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

[307] Alpert, P. T. (2014). Alcohol abuse in older adults: An invisible population. *Home Health Care Management and Practice, 26*(4), 269–272.

[308] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30,* 629–654.

[309] Choi, N. G., DiNitto, D. M., & Marti, C. N. (2014). Treatment use, perceived need, and barriers to seeking treatment for substance abuse and mental health problems among older adults compared to younger adults. *Drug and Alcohol Dependence, 145,* 113–120.

[310] Kuerbis, A., Sacco, P., Blazer, D., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30,* 629–654.

[311] Pace, C. A., & Uebelacker, L. A. (2018). Addressing unhealthy substance use in primary care. *Medical Clinics of North America, 102*(4), 567–586.

[312] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[313] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[314] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[315] West, N. A., Severtson, S. G., Green, J. L., & Dart, R. C. (2015). Trends in abuse and misuse of prescription opioids among older adults. *Drug and Alcohol Dependence, 149,* 117–121.

[316] Choi, N. G., DiNitto, D. M., & Marti, C. N. (2015). Treatment use, perceived need, and barriers to seeking treatment for substance abuse and mental health problems among older adults compared to younger adults. *Drug and Alcohol Dependence, 145,* 113–120.

[317] Kuerbis, A., Hagman, B. T., & Sacco, P. (2013). Functioning of alcohol use disorders criteria among middle-aged and older adults: Implications for DSM-5. *Substance Use and Misuse, 48*(4), 309–322.

[318] Office of the Surgeon General. (2016). *Facing addiction in America: The Surgeon General's report on alcohol, drugs, and health.* Washington, DC: Department of Health and Human Services.

[319] 2019 American Geriatrics Society Beers Criteria® Update Expert Panel. (2019). Updated AGS Beers Criteria® for potentially inappropriate medication use in older adults. *Journal of the American Geriatrics Society, 67*(4), 674–694.

[320] Tansil, K. A., Esser, M. B., Sandhu, P., Reynolds, J. A., Elder, R. W., Williamson, R. S., … Fielding, J. E. (2016). Alcohol electronic screening and brief intervention: A community guide systematic review. *American Journal of Preventive Medicine, 51*(5), 801–811.

[321] U.S. Department of Health and Human Services & U.S. Department of Agriculture. (2015). *2015–2020 Dietary Guidelines for Americans* (8th ed.). Retrieved from https://health.gov/our-work/food-nutrition/2015-2020-dietary-guidelines

[322] Centers for Disease Control and Prevention. (2018). Alcohol and Public Health. Frequently Asked Questions. Retrieved from www.cdc.gov/alcohol/faqs.htm

[323] National Institute on Alcohol Abuse and Alcoholism. (n.d.). Drinking levels defined. Retrieved from www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

[324] U.S. Department of Health and Human Services & U.S. Department of Agriculture. (2015). *2015–2020 Dietary Guidelines for Americans* (8th ed.). Retrieved from https://health.gov/our-work/food-nutrition/2015-2020-dietary-guidelines

[325] U.S. Preventive Services Task Force. (2018). Final recommendation statement: Unhealthy alcohol use in adolescents and adults: Screening and behavioral counseling interventions. Retrieved from www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/unhealthy-alcohol-use-in-adolescents-and-adults-screening-and-behavioral-counseling-interventions

[326] U.S. Prevention Services Task Force. (2018). Screening and behavioral counseling interventions to reduce unhealthy alcohol use in adolescents and adults: Recommendation statement. *JAMA, 320*(18), 1899–1909.

[327] U.S. Preventive Services Task Force. (2018). Final recommendation statement: Unhealthy alcohol use in adolescents and adults: Screening and behavioral counseling interventions. Retrieved from www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/unhealthy-alcohol-use-in-adolescents-and-adults-screening-and-behavioral-counseling-interventions

[328] Aalto, M., Alho, H., Halm, J., & Seppä, K. (2011). The Alcohol Use Disorders Identification Test (AUDIT) and its derivatives in screening for heavy drinking among the elderly. *International Journal of Geriatric Psychiatry, 26,* 881–885.

329 Selin, K. H. (2003). Test-retest reliability of the Alcohol Use Disorder Identification Test in a general population sample. *Alcoholism, Clinical and Experimental Research, 27*(9), 1428–1435.

330 Purcell, B., & Olmstead, M. C. (2014). The performance and feasibility of three brief alcohol screening tools in a senior population. *Canadian Psychology, 55*(2a), 19.

331 Purcell, B., Flower, M. C., & Busto, U. (2017). Senior Alcohol Misuse Indicator (SAMI) tool. Centre for Addiction and Mental Health. Retrieved June 19, 2019, from www.porticonetwork.ca/documents/21686/0/SAMI+fillable/f6668443-559f-4ad8-9e5f-6de47a38e70a

332 Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

333 Adamson, S. J., Kay-Lambkin, F. J., Baker, A. L., Lewin, T. J., Thornton, L., … Sellman, J. D. (2010). An improved brief measure of cannabis misuse: The Cannabis Use Disorders Identification Test–Revised (CUDIT-R). *Drug and Alcohol Dependence, 110,* 137–143.

334 Adamson, S. J., Kay-Lambkin, F. J., Baker, A. L., Lewin, T. J., Thornton, L., … Sellman, J. D. (2010). An improved brief measure of cannabis misuse: The Cannabis Use Disorders Identification Test–Revised (CUDIT-R). *Drug and Alcohol Dependence, 110,* 137–143.

335 McNeely, J., Strauss, S. M., Rotrosen, J., Ramautar, A., & Gourevitch, M. N. (2016). Validation of an audio computer-assisted self-interview (ACASI) version of the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) in primary care clients. *Addiction, 111*(2), 233–244.

336 Gryczynski, J., Kelly, S. M., Mitchell, S. G., Kirk, A., O'Grady, K. E., & Schwartz, R. P. (2015). Validation and performance of the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) among adolescent primary care patients. *Addiction, 110*(2), 240–247.

337 Ali, R., Meena, S., Eastwood, B., Richards, I., & Marsden, J. (2013). Ultra-rapid screening for substance use disorders: The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST-Lite). *Drug and Alcohol Dependence, 132,* 352–361.

338 Cacciola, J. S., Alterman, A. I., Dephilippis, D., Drapkin, M. L., Valadez, C., Jr., Fala, N. C., … McKay, J. R. (2013). Development and initial evaluation of the Brief Addiction Monitor (BAM). *Journal of Substance Abuse Treatment, 44*(3), 256–263.

339 Cacciola, J. S., Alterman, A. I., Dephilippis, D., Drapkin, M. L., Valadez, C., Jr., Fala, N. C., … McKay, J. R. (2013). Development and initial evaluation of the Brief Addiction Monitor (BAM). *Journal of Substance Abuse Treatment, 44*(3), 256–263.

340 Brown, R. L., & Rounds, L. A. (1995). Conjoint screening questionnaires for alcohol and other drug abuse: Criterion validity in a primary care practice. *Wisconsin Medical Journal, 94*(3), 135–140.

341 Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

342 Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

343 Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

344 Searby, A., Maude, P., & McGrath, I. (2015). Dual diagnosis in older adults: A review. *Issues in Mental Health Nursing, 36*(2), 104–111.

345 Hendrie, H. C., Lindgren, D., Hay, D. P., Lane, K. A., Gao, S., Purnell, C., … Callahan, C. M. (2013). Comorbidity profile and healthcare utilization in elderly patients with serious mental illnesses. *American Journal of Geriatric Psychiatry, 21*(12), 1267–1276.

346 Lane, S. D., Costa, S. C., Teixiera, A. L., Reynolds, C. F., & Diniz, B. S. (2018). The impact of substance use disorders on clinical outcomes in older-adult psychiatric inpatients. *International Journal of Geriatric Psychiatry, 33*(2), 323–329.

347 Searby, A., Maude, P., & McGrath, I. (2015). Dual diagnosis in older adults: A review. *Issues in Mental Health Nursing, 36*(2), 104–111.

348 Sacco, P., Unick, G. J., Zanjani, F., & Camlin, E. A. S. (2015). Hospital outcomes in major depression among older adults: Differences by alcohol comorbidity. *Journal of Dual Diagnosis, 11*(1), 83–92.

349 Cleary, M., Sayers, J., Bramble, M., Jackson, D., & Lopez, V. (2017). Overview of substance use and mental health among the "baby boomers" generation. *Issues in Mental Health Nursing, 38*(1), 61–65.

350 Choi, N. G., DiNitto, D. M., Marti, C. N., & Choi, B. Y. (2015). Associations of mental health and substance use disorders with presenting problems and outcomes in older adults' emergency department visits. *Academic Emergency Medicine, 22*(11), 1316–1326.

351 Choi, N. G., DiNitto, D. M., Marti, C. N., & Choi, B. Y. (2015). Associations of mental health and substance use disorders with presenting problems and outcomes in older adults' emergency department visits. *Academic Emergency Medicine, 22*(11), 1316–1326.

[352] Bartels, S. J., Blow, F. C., Van Citters, A. D., & Brockmann, L. M. (2006). Dual diagnosis among older adults: Co-occurring substance abuse and psychiatric illness. *Journal of Dual Diagnosis, 2*(3), 9–30.

[353] Moore, A. A., Beck, J. C., Barbor, T. F., Hays, R. D., & Reuben, D. B. (2002). Beyond alcoholism: Identifying older, at-risk drinkers in primary care. *Journal of Studies on Alcohol, 63,* 316–324.

[354] Ettner, S. L., Xu, H., Duru, O. K., Ang, A., Tseng, C. H., Tallen L., … Moore A. A. (2014). The effect of an educational intervention on alcohol consumption, at-risk drinking, and health care utilization in older adults: The Project SHARE study. *Journal of Studies on Alcohol and Drugs, 75*(3), 447–457.

[355] Barnes, A. J., Moore, A. A., Xu, H., Ang, A., Tallen, L., Mirkin, M., & Ettner, S. L. (2010). Prevalence and correlates of at-risk drinking among older adults: The Project SHARE study. *Journal of General Internal Medicine, 25*(8), 840–846.

[356] Barnes, A. J., Moore, A. A., Xu, H., Ang, A., Tallen, L., Mirkin, M., & Ettner, S. L. (2010). Prevalence and correlates of at-risk drinking among older adults: The Project SHARE study. *Journal of General Internal Medicine, 25*(8), 840–846.

[357] Searby, A., Maude, P., & McGrath, I. (2015). Dual diagnosis in older adults: A review. *Issues in Mental Health Nursing, 36*(2), 104–111.

[358] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[359] Searby, A., Maude, P., & McGrath, I. (2015). Dual diagnosis in older adults: A review. *Issues in Mental Health Nursing, 36*(2), 104–111.

[360] Wu, L. T., & Blazer, D. G. (2014). Substance use disorders and psychiatric comorbidity in mid and later life: A review. *International Journal of Epidemiology, 43*(2), 304–317.

[361] Yesavage, J. A. (n.d.). Geriatric Depression Scale. Retrieved from https://web.stanford.edu/~yesavage/GDS.html

[362] Brown, E. L., Raue, P. J., & Halpert, K. (2015). Evidence-based practice guideline: Depression detection in older adults with dementia. *Journal of Gerontological Nursing, 41*(11), 15–21.

[363] Brown, E. L., Raue, P. J., & Halpert, K. (2015). Evidence-based practice guideline: Depression detection in older adults with dementia. *Journal of Gerontological Nursing, 41*(11), 15–21.

[364] Brown, E. L., Raue, P. J., & Halpert, K. (2015). Evidence-based practice guideline: Depression detection in older adults with dementia. *Journal of Gerontological Nursing, 41*(11), 15–21.

[365] Yesavage, J. A. (n.d.). Geriatric Depression Scale. Retrieved from https://web.stanford.edu/~yesavage/GDS.html

[366] U.S. Preventive Services Task Force. (2019). *Final recommendation statement: Depression in adults: Screening.* Retrieved from www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/depression-in-adults-screening1

[367] Phelan, E., Williams, B., Meeker, K., Bonn, K., Frederick, J., Logerfo, J., & Snowden, M. (2010). A study of the diagnostic accuracy of the PHQ-9 in primary care elderly. *BMC Family Practice, 11,* 63.

[368] Richardson, T. M., He, H., Podgorski, C., Tu, X., & Conwell, Y. (2010). Screening for depression in aging services clients. *American Journal of Geriatric Psychiatry, 18*(12), 1116–1123.

[369] Richardson, T. M., He, H., Podgorski, C., Tu, X., & Conwell, Y. (2010). Screening for depression in aging services clients. *American Journal of Geriatric Psychiatry, 18*(12), 1116–1123.

[370] Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine, 16*(9), 606–613.

[371] Kroene, K., & Spitzer, R. L. (2002). The PHQ-9: A new depression diagnostic and severity measure. *Psychiatric Annals, 32,* 509–521.

[372] Richardson, T. M., He, H., Podgorski, C., Tu, X., & Conwell, Y. (2010). Screening for depression in aging services clients. *American Journal of Geriatric Psychiatry, 18*(12), 1116–1123.

[373] Bower, E. S., Wetherell, J. L., Mon, T., & Lenze, E. J. (2015). Treating anxiety disorders in older adults: Current treatments and future directions. *Harvard Review of Psychiatry, 23*(5), 329–342.

[374] Reynolds, K., Pietrzak, R. H., El-Gabalawy, R., Mackenzie, C. S., & Sareen, J. (2015). Prevalence of psychiatric disorders in U.S. older adults: Findings from a nationally representative survey. *World Psychiatry, 14*(1), 74–81.

[375] Bower, E. S., Wetherell, J. L., Mon, T., & Lenze, E. J. (2015). Treating anxiety disorders in older adults: Current treatments and future directions. *Harvard Review of Psychiatry, 23*(5), 329–342.

[376] Reynolds, K., Pietrzak, R. H., El-Gabalawy, R., Mackenzie, C. S., & Sareen, J. (2015). Prevalence of psychiatric disorders in U.S. older adults: Findings from a nationally representative survey. *World Psychiatry, 14*(1), 74–81.

[377] Koychev, I., & Ebmeier, K. P. (2016). Anxiety in older adults often goes undiagnosed. *Practitioner, 260*(1789), 17–20, 2–3.

[378] Wolitzky-Taylor, K. B., Castriotta, N., Lenze, E. J., Stanley, M. A., & Craske, M. G. (2010). Anxiety disorders in older adults: A comprehensive review. *Depression and Anxiety, 27*(2), 190–211.

[379] Koychev, I., & Ebmeier, K. P. (2016). Anxiety in older adults often goes undiagnosed. *Practitioner, 260*(1789), 17–20, 2–3.

[380] Bower, E. S., Wetherell, J. L., Mon, T., & Lenze, E. J. (2015). Treating anxiety disorders in older adults: Current treatments and future directions. *Harvard Review of Psychiatry, 23*(5), 329–342.

[381] Kessler, R. C., Petukhova, M., Sampson, N. A., Zaslavsky, A. M., & Wittchen, H.-U. (2012). Twelve-month and lifetime prevalence and lifetime morbid risk of anxiety and mood disorders in the United States. *International Journal of Methods in Psychiatric Research, 21*(3), 169–184.

[382] Kessler, R. C., Petukhova, M., Sampson, N. A., Zaslavsky, A. M., & Wittchen, H.-U. (2012). Twelve-month and lifetime prevalence and lifetime morbid risk of anxiety and mood disorders in the United States. *International Journal of Methods in Psychiatric Research, 21*(3), 169–184.

[383] Reynolds, K., Pietrzak, R. H., Mackenzie, C. S., Chou, K. L., Sareen, J. (2016). Post-traumatic stress disorder across the adult lifespan: Findings from a nationally representative survey. *American Journal of Geriatric Psychiatry, 24*(1), 81–93.

[384] Bryant, C., Jackson, H., & Ames, D. (2008). The prevalence of anxiety in older adults: Methodological issues and a review of the literature. *Journal of Affective Disorders, 109*(3), 233–250.

[385] Lin, J. C., Karno, M. P., Grella, C. E., Ray, L. A., Liao, D. H., & Moore, A. A. (2014). Psychiatric correlates of alcohol and tobacco use disorders in U.S. adults aged 65 years and older: Results from the 2001–2002 National Epidemiologic Survey of Alcohol and Related Conditions. A*merican Journal of Geriatric Psychiatry, 22*(11), 1356–1363.

[386] Lin, J. C., Karno, M. P., Grella, C. E., Ray, L. A., Liao, D. H., & Moore, A. A. (2014). Psychiatric correlates of alcohol and tobacco use disorders in U.S. adults aged 65 years and older: Results from the 2001–2002 National Epidemiologic Survey of Alcohol and Related Conditions. *American Journal of Geriatric Psychiatry, 22*(11), 1356–1363.

[387] Christie, M. M., Bamber, D., Powell, C., Arrindell, T., & Pant, A. (2013). Older adult problem drinkers: Who presents for alcohol treatment? *Aging and Mental Health, 17*(1), 24–32.

[388] Mackenzie, C. S., Reynolds, K., Chou, K. L., Pagura, J., & Sareen, J. (2011). Prevalence and correlates of generalized anxiety disorder in a national sample of older adults. *American Journal of Geriatric Psychiatry, 19*(4), 305–315.

[389] Blazer, D. G., & Wu, L. T. (2012). Patterns of tobacco use and tobacco-related psychiatric morbidity and substance use among middle-aged and older adults in the United States. *Aging and Mental Health, 16*(3), 296–304.

[390] Therrien, Z., & Hunsley, J. (2012). Assessment of anxiety in older adults: A systematic review of commonly used measures. *Aging and Mental Health, 16*(1), 1–16.

[391] Gould, C. E., Segal, D. L., Yochim, B. P., Pachana, N. A., Byrne, G. J., & Beaudreau, S. A. (2014). Measuring anxiety in late life: A psychometric examination of the Geriatric Anxiety Inventory and Geriatric Anxiety Scale. *Journal of Anxiety Disorder, 28*(8), 804–811.

[392] Mueller, A. E., Segal, D. L., Gavett, B., Marty, M. A., Yochim, B., June, A., & Coolidge, F. L. (2015). Geriatric Anxiety Scale: Item response theory analysis, differential item functioning, and creation of a ten-item short form (GAS-10). *International Psychogeriatrics, 27*(7), 1099–1111.

[393] Balsamo, M., Cataldi, F., Carlucci, L., & Fairfield, B. (2018). Assessment of anxiety in older adults: A review of self-report measures. *Clinical Interventions in Aging, 13,* 573–593.

[394] Segal, D. L., June, A., Payne, M., Coolidge, F. L., & Yochim, B. (2010). Development and initial validation of a self-report assessment tool for anxiety among older adults: The Geriatric Anxiety Scale. *Journal of Anxiety Disorders, 24,* 709–714.

[395] Meyer, T., Miller, M., Metzger, R., & Borkovec, T. D. (1990). Development and validation of the Penn State Worry Scale. *Behaviour Research and Therapy, 28,* 487–495.

[396] Therrien, Z., & Hunsley, J. (2012). Assessment of anxiety in older adults: A systematic review of commonly used measures. *Aging and Mental Health, 16*(1), 1–16.

[397] Flanagan, J. C., Korte, K. J., Killeen, T. K., & Back, S. E. (2016). Concurrent treatment of substance use and PTSD. *Current Psychiatry Reports, 18*(8), 70.

[398] Forman-Hoffman, V. L., Bose, J., Batts, K. R., Glasheen, C., Hirsch, E., Karg, R. S., … Hedden, S. L. (2016). Correlates of lifetime exposure to one or more potentially traumatic events and subsequent posttraumatic stress among adults in the United States: Results from the Mental Health Surveillance Study, 2008–2012. *CBHSQ Data Review.* Rockville, MD: Substance Abuse and Mental Health Services Administration.

[399] Choi, N. G., DiNitto, D. M., Marti, C. N., & Choi, B. Y. (2017). Association of adverse childhood experiences with lifetime mental and substance use disorders among men and women aged 50+ years. *International Psychogeriatrics, 29*(3), 359–372.

[400] Choi, N. G., DiNitto, D. M., Marti, C. N., & Choi, B. Y. (2017). Association of adverse childhood experiences with lifetime mental and substance use disorders among men and women aged 50+ years. *International Psychogeriatrics, 29*(3), 359–372.

[401] Kessler, R. C., Petukhova, M., Sampson, N. A., Zaslavsky, A. M., & Wittchen, H.-U. (2012). Twelve-month and lifetime prevalence and lifetime morbid risk of anxiety and mood disorders in the United States. *International Journal of Methods in Psychiatric Research, 21*(3), 169–184.

[402] Reynolds, K., Pietrzak, R. H., Mackenzie, C. S., Chou, K. L., & Sareen, J. (2016). Post-traumatic stress disorder across the adult lifespan: Findings from a nationally representative survey. *American Journal of Geriatric Psychiatry, 24*(1), 81–93.

[403] Cukor, J., Wyka, K., Jayasinghe, N., & Difede, J. (2010). The nature and course of subthreshold PTSD. *Journal of Anxiety Disorder, 24*(8), 918–923.

[404] Centers for Disease Control and Prevention. (2017). Elder abuse prevention. Retrieved April 9, 2019, from www.cdc.gov/features/elderabuse/index.html

[405] Hall, J. E., Karch, D. L., & Crosby, A. E. (2016). *Elder abuse surveillance: Uniform definitions and recommended core data elements for use In elder abuse surveillance, version 1.0.* Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. Retrieved from www.cdc.gov/violenceprevention/pdf/ea_book_revised_2016.pdf

[406] Knight, L., & Hester, M. (2016). Domestic violence and mental health in older adults. *International Review of Psychiatry, 28*(5), 464–474.

[407] Dong, X. Q. (2015). Elder abuse: Systematic review and implications for practice. *Journal of the American Geriatrics Society, 63*(6), 1214–1238.

[408] Dong, X. Q. (2015). Elder abuse: Systematic review and implications for practice. *Journal of the American Geriatrics Society, 63*(6), 1214–1238.

[409] Acierno, R., Hernandez-Tejada, M. A., Anetzberger, G. J., Loew, D., & Muzzy, W. (2017). The National Elder Mistreatment Study: An 8-year longitudinal study of outcomes. *Journal of Elder Abuse and Neglect, 29,* 254–269.

[410] Dong, X. Q. (2015). Elder abuse: Systematic review and implications for practice. *Journal of the American Geriatrics Society, 63*(6), 1214–1238.

[411] Pless Kaiser, A., Cook, J. M., Glick, D. M., & Moye, J. (2019). Posttraumatic stress disorder in older adults: A conceptual review. *Clinical Gerontologist, 42*(4), 359–376.

[412] Substance Abuse and Mental Health Services Administration. (2014). *Trauma-informed care in behavioral health services.* Treatment Improvement Protocol (TIP) Series 57. HHS Publication No. (SMA) 13-4801. Rockville, MD: Substance Abuse and Mental Health Services Administration.

[413] Tsai, J., Armour, C., Southwick, S. M., & Pietrzak, R. H. (2015). Dissociative subtype of DSM-5 posttraumatic stress disorder in U.S. veterans. *Journal of Psychiatric Research, 66,* 67–74.

[414] Ho, C. L., Schlenger, W. E., Kulka, R. A., & Marmar, C. R. (2017). The influence of different criteria for establishing optimal cutoff scores on performance of two self-report measures for warzone PTSD. *Psychological Assessment, 29*(2), 232–237.

[415] Shrira, A. (2016). A youthful age identity mitigates the effect of post-traumatic stress disorder symptoms on successful aging. *American Journal of Geriatric Psychiatry, 24*(2), 174–175.

[416] Ho, C. L., Schlenger, W. E., Kulka, R. A., & Marmar, C. R. (2017). The influence of different criteria for establishing optimal cutoff scores on performance of two self-report measures for warzone PTSD. *Psychological Assessment, 29*(2) 232–237.

[417] Weathers, F. W., Litz, B. T., Keane, T. M., Palmieri, P. A., Marx, B. P., & Schnurr, P. P. (2013). PTSD Checklist for DSM-5 (PCL-5). Retrieved from www.ptsd.va.gov/professional/assessment/adult-sr/ptsd-checklist.asp

[418] Weathers, F. W., Litz, B. T., Keane, T. M., Palmieri, P. A., Marx, B. P., & Schnurr, P. P. (2013). The PTSD Checklist for DSM-5 (PCL-5). Scale available from the National Center for PTSD at www.ptsd.va.gov/professional/assessment/adult-sr/ptsd-checklist.asp

[419] Prins, A., Bovin, M. J., Smolenski, D. J., Marx, B. P., Kimerling, R., Jenkins-Guarnieri, M. A., … Tiet, Q. Q. (2016). The Primary Care PTSD Screen for DSM-5 (PC-PTSD-5): Development and evaluation within a veteran primary care sample. *Journal of General Internal Medicine, 31*(10), 1206–1211.

[420] Prins, A., Bovin, M. J., Smolenski, D. J., Marx, B. P., Kimerling, R., Jenkins-Guarnieri, M. A., … Tiet, Q. Q. (2016). The Primary Care PTSD Screen for DSM-5 (PC-PTSD-5): Development and evaluation within a veteran primary care sample. *Journal of General Internal Medicine, 31*(10), 1206–1211.

[421] Prins, A., Bovin, M. J., Smolenski, D. J., Marx, B. P., Kimerling, R., Jenkins-Guarnieri, M. A., … Tiet, Q. Q. (2016). The Primary Care PTSD Screen for DSM-5 (PC-PTSD-5): Development and evaluation within a veteran primary care sample. *Journal of General Internal Medicine, 31*(10), 1206–1211.

[422] Yaffe, M. J., & Tazkarji, B. (2012). Understanding elder abuse in family practice. *Canadian Family Physician, 58*(12), 1336–1340.

[423] Langa, K. M., Larson, E. B., Crimmins, E. M., Faul, J. D., Levine, D. A., Kabeto, M. U., & Weir, D. R. (2017). A comparison of the prevalence of dementia in the United States in 2000 and 2012. *JAMA Internal Medicine, 177*(1), 51–58.

[424] Langa, K. M., Larson, E. B., Crimmins, E. M., Faul, J. D., Levine, D. A., Kabeto, M. U., & Weir, D. R. (2017). A comparison of the prevalence of dementia in the United States in 2000 and 2012. *JAMA Internal Medicine, 177*(1), 51–58.

[425] Petersen, R. C. (2011). Clinical practice: Mild cognitive impairment. *New England Journal of Medicine, 364*(23), 2227–2234.

[426] Petersen, R. C. (2016). Mild cognitive impairment. *Continuum (Minneapolis, Minnesota), 22*(2 Dementia), 404–408.

[427] Petersen, R. C., Caracciolo, B., Brayne, C., Gauthier, S., Jelic, V., & Fratiglioni, L. (2014). Mild cognitive impairment: A concept in evolution. *Journal of Internal Medicine, 275*(3), 214–228.

[428] González-Reimers, E., Santolaria-Fernández, F., Martín-González, M. C., Fernández-Rodríguez, C. M., & Quintero-Platt, G. (2014). Alcoholism: A systemic proinflammatory condition. *World Journal of Gastroenterology, 20*(40), 14660–14671.

[429] Bjork, J. M., & Gilman, J. M. (2014). The effects of acute alcohol administration on the human brain: Insights from neuroimaging. *Neuropharmacology, 84,* 101–110.

[430] Downer, B., Zanjani, F., & Fardo, D. W. (2014). The relationship between midlife and late life alcohol consumption, APOE e4 and the decline in learning and memory among older adults. *Alcohol and Alcoholism, 49*(1), 17–22.

[431] Gongvatana, A., Morgan, E. E., Iudicello, J. E., Letendre, S. L., Grant, I., & Woods, S. P. (2014). A history of alcohol dependence augments HIV-associated neurocognitive deficits in persons aged 60 and older. *Journal of Neurovirology, 20*(5), 505–513.

[432] Kuźma, E., Llewellyn, D. J., Langa, K. M., Wallace, R. B., & Lang, I. A. (2014). History of alcohol use disorders and risk of severe cognitive impairment: A 19-year prospective cohort study. *American Journal of Geriatric Psychiatry, 22*(10), 1047–1054.

[433] de la Monte, S. M., & Kril, J. J. (2014). Human alcohol-related neuropathology. *Acta Neuropathologica, 127*(1), 71–90.

[434] Topiwala, A., Allan, C. L., Valkanova, V., Zsoldos, E., Filippini, N., Sexton, C., … Ebmeier, K. P. (2017). Moderate alcohol consumption as risk factor for adverse brain outcomes and cognitive decline: Longitudinal cohort study. *BMJ, 357*, j2353.

[435] Woods, A. J., Porges, E. C., Bryant, V. E., Seider, T., Gongvatana, A., Kahler, C. W., … Cohen, R. A. (2016). Current heavy alcohol consumption is associated with greater cognitive impairment in older adults. *Alcoholism, Clinical and Experimental Research, 40*(11), 2435–2444.

[436] Zhong, G., Wang, Y., Zhang, Y., & Zhao, Y. (2015). Association between benzodiazepine use and dementia: A meta-analysis. *PLoS One, 10*(5), e0127836.

[437] Billioti de Gage, S., Pariente, A., & Bégaud, B. (2015). Is there really a link between benzodiazepine use and the risk of dementia? *Expert Opinion on Drug Safety, 14*(5), 733–747.

[438] Puustinen, J., Lähteenmäki, R., Polo-Kantola, P., Salo, P., Vahlberg, T., Lyles, A., … & Kivelä, S. L. (2014). Effect of withdrawal from long-term use of temazepam, zopiclone or zolpidem as hypnotic agents on cognition in older adults. *European Journal of Clinical Pharmacology, 70*(3), 319–329.

[439] Curran, H. V., Freeman, T. P., Mokrysz, C., Lewis, D. A., Morgan, C. J., & Parsons, L. H. (2016). Keep off the grass? Cannabis, cognition and addiction. *National Reviews: Neuroscience, 17*(5), 293–306.

[440] Volkow, N. D., Swanson, J. M., Evins, A. E., DeLisi, L. E., Meier, M. H., Gonzalez, R., … & Baler R. (2016). Effects of cannabis use on human behavior, including cognition, motivation, and psychosis: A review. *JAMA Psychiatry, 73*(3), 292–297.

[441] Broyd, S. J., van Hell, H. H., Beale, C., Yücel, M., & Solowij, N. (2016). Acute and chronic effects of cannabinoids on human cognition: A systematic review. *Biological Psychiatry, 79*(7), 557–567.

[442] Mahoney, J. J. (2019). Cognitive dysfunction in individuals with cocaine use disorder: Potential moderating factors and pharmacological treatments. *Experimental and Clinical Psychopharmacology, 27*(3), 203–214.

[443] Zhong, G., Wang, Y., Zhang, Y., Guo, J. J., & Zhao, Y. (2015). Smoking is associated with an increased risk of dementia: A meta-analysis of prospective cohort studies with investigation of potential effect modifiers. *PLoS One, 10*(3), e0118333.

[444] National Institute on Aging. (n.d.). Assessing cognitive impairment in older patients. Retrieved from www.nia.nih.gov/health/assessing-cognitive-impairment-older-patients#bunn

[445] Alzheimer's Association. (n.d.). Cognitive assessment. Retrieved from www.alz.org/professionals/health-systems-clinicians/cognitive-assessment

[446] Fage, B. A., Chan, C. C., Gill, S. S., Noel-Storr, A. H., Herrmann, N., Smailagic, N., … Seitz, D. P. (2015). Mini-Cog for the diagnosis of Alzheimer's disease dementia and other dementias within a community setting. *Cochrane Database of Systematic Reviews, 2015*(2), 1–33. doi:10.1002/14651858.CD010860.pub2.

[447] Yokomizo, J. E., Simon, S. S., & Bottino, C. M. (2014). Cognitive screening for dementia in primary care: A systematic review. *International Psychogeriatrics, 26*(11), 1783–1804.

[448] Tsoi, K. K., Chan, J. Y., Hirai, H. W., Wong, S. Y., & Kwok, T. C. (2015). Cognitive tests to detect dementia: A systematic review and meta-analysis. *JAMA Internal Medicine, 175*(9), 1450–1458.

[449] Montreal Cognitive Assessment. (n.d.). FAQ. Retrieved from www.mocatest.org/faq

[450] PAR. (n.d.). MMSE. Retrieved from www.parinc.com/Products/Pkey/237

[451] Shapiro, B., Coffa, D., & McCance-Katz, E. F. (2013). A primary care approach to substance misuse. *American Family Physician, 88*(2), 113–121.

[452] Miller, W. R., & Rollnick, S. (2013). *Motivational interviewing: Helping people change* (3rd ed.). New York, NY: Guilford Press.

[453] Substance Abuse and Mental Health Services Administration. (1999). *Brief interventions and brief therapies for substance abuse.* Treatment Improvement Protocol (TIP) Series. 34. HHS Publication No. (SMA) 12-3952. Rockville, MD: Substance Abuse and Mental Health Services Administration.

[454] Boucek, L., Kane, I., Lindsay, D. L., Hagle, H., Salvio, K., & Mitchell, A. M. (2019). Screening, brief intervention, and referral to treatment (SBIRT) education of residential care nursing staff: Impact on staff and residents. *Geriatric Nursing, 40*(6), 553–557.

[455] Kuerbis, A., & Sacco, P. (2013). A review of existing treatments for substance abuse among the elderly and recommendations for future directions. *Substance Abuse, 7,* 13–37.

[456] National Institute on Drug Abuse. (2014). *Principles of drug abuse treatment for criminal justice populations: A research-based guide.* Retrieved from www.drugabuse.gov/publications/principles-drug-abuse-treatment-criminal-justice-populations/legally-mandated-treatment-effective

[457] Schonfeld, L., King-Kallimanis, B. L., Duchene, D. M., Etheridge, R. L., Herrera, J. R., Barry, K. L., & Lynn, N. (2010). Screening and brief intervention for substance misuse among older adults: The Florida BRITE project. *American Journal of Public Health, 100*(1), 108–114.

[458] Schonfeld, L., Hazlett, R. W., Hedgecock, D. K., Duchene, D. M., Burns, L. V., & Gum, A. M. (2015). Screening, brief intervention, and referral to treatment for older adults with substance misuse. *American Journal of Public Health, 105*(1), 205–211.

[459] Schonfeld, L., King-Kallimanis, B. L., Duchene, D. M., Etheridge, R. L., Herrera, J. R., Barry, K. L., & Lynn, N. (2010). Screening and brief intervention for substance misuse among older adults: The Florida BRITE project. *American Journal of Public Health, 100*(1), 108–114.

[460] Colrain, I. M., Nicholas, C. L., & Baker, F. C. (2014). Alcohol and the sleeping brain. *Handbook of Clinical Neurology, 125,* 415–431.

[461] Garcia, A. N., & Salloum, I. M. (2015). Polysomnographic sleep disturbances in nicotine, caffeine, alcohol, cocaine, opioid, and cannabis use: A focused review. *American Journal on Addictions, 24*(7), 590–598.

[462] Canham, S. L., Kaufmann, C. N., Mauro, P. M., Mojtabai, R., & Spira, A. P. (2015). Binge drinking and insomnia in middle-aged and older adults: The Health and Retirement Study. *International Journal of Geriatric Psychiatry, 30*(3), 284–291.

[463] Cohrs, S., Rodenbeck, A., Riemann, D., Szagun, B., Jaehne, A., Brinkmeyer, J., … Winterer, G. (2014). Impaired sleep quality and sleep duration in smokers—Results from the German Multicenter Study on Nicotine Dependence. *Addiction Biology, 19*(3), 486–496.

[464] Garcia, A. N., & Salloum, I. M. (2015). Polysomnographic sleep disturbances in nicotine, caffeine, alcohol, cocaine, opioid, and cannabis use: A focused review. *American Journal on Addictions, 24*(7), 590–598.

[465] Correa, D., Farney, R. J., Chung, F., Prasad, A., Lam, D., & Wong, J. (2015). Chronic opioid use and central sleep apnea: A review of the prevalence, mechanisms, and perioperative considerations. *Anesthesia and Analgesia, 120*(6), 1273–1285.

[466] Substance Abuse and Mental Health Services Administration. (2014). Treating sleep problems of people in recovery from substance use disorders. *In Brief, 8*(2). Retrieved from https://store.samhsa.gov/product/Treating-Sleep-Problems-of-People-in-Recovery-From-Substance-Use-Disorders/SMA14-4859

[467] Wu, L., & Sun, D. (2017). Sleep duration and falls: A systemic review and meta-analysis of observational studies. *Journal of Sleep Research, 26*(3), 293–301.

[468] Stone, K. L., Blackwell, T. L., Ancoli-Israel, S., Cauley, J. A., Redline, S., Marshall, L. M., & Ensrud, K. E. (2014). Sleep disturbances and risk of falls in older community-dwelling men: The outcomes of Sleep Disorders in Older Men (MrOS Sleep) Study. *Journal of the American Geriatrics Society, 62*(2), 299–305.

469 da Silva, A. A., de Mello, R. G. B., Schaan, C. W., Fuchs, F. D., Redline, S., & Fuchs, S. C. (2016). Sleep duration and mortality in the elderly: A systematic review with meta-analysis. *BMJ Open, 6*(2), e008119.

470 Saccomano, S. J. (2014). Sleep disorders in older adults. *Journal of Gerontological Nursing, 40*(3), 38–45.

471 Choi, N. G., DiNitto, D. M., Marti, C. N., & Choi, B. Y. (2017). Association between nonmedical marijuana and pain reliever uses among individuals aged 50+. *Psychoactive Drugs, 49*(4), 267–278.

472 Brennan, P. L., & Soohoo, S. (2013). Pain and use of alcohol in later life: Prospective evidence from the Health and Retirement Study. *Journal of Aging and Health, 25*(4), 656–677.

473 Brennan, P. L., & Soohoo, S. (2013). Pain and use of alcohol in later life: Prospective evidence from the Health and Retirement Study. *Journal of Aging and Health, 25*(4), 656–677.

474 Gilson, K. M., Bryant, C., & Judd, F. (2014). The hidden harms of using alcohol for pain relief in older adults. *International Psychogeriatrics, 26*(11), 1929–1930.

475 Kang, Y., & Demiris, G. (2017). Self-report pain assessment tools for cognitively intact older adults: Integrative review. *International Journal of Older People Nursing, 13*(2), e12170.

476 Schofield, P., & Abdulla, A. (2018). Pain assessment in the older population: What the literature says. *Age and Ageing, 47*(3), 324–327.

477 Schofield, P., & Abdulla, A. (2018). Pain assessment in the older population: What the literature says. *Age and Ageing, 47*(3), 324–327.

478 Horgas, A. L. (2017). Pain assessment in older adults. *Nursing Clinics of North America, 52*(3), 375–385.

479 Horgas, A. L. (2017). Pain assessment in older adults. *Nursing Clinics of North America, 52*(3), 375–385.

480 Booker, S. Q., & Herr, K. A. (2016). Assessment and measurement of pain in adults in later life. *Clinics in Geriatric Medicine, 32*(4), 677–692.

481 Booker, S. Q., & Herr, K. A. (2016). Assessment and measurement of pain in adults in later life. *Clinics in Geriatric Medicine, 32*(4), 677–692.

482 Booker, S. Q., & Herr, K. A. (2016). Assessment and measurement of pain in adults in later life. *Clinics in Geriatric Medicine, 32*(4), 677–692.

483 Kang, Y., & Demiris, G. (2017). Self-report pain assessment tools for cognitively intact older adults: Integrative review. *International Journal of Older People Nursing, 13*(2), e12170.

484 Kang, Y., & Demiris, G. (2017). Self-report pain assessment tools for cognitively intact older adults: Integrative review. *International Journal of Older People Nursing, 13*(2), e12170.

485 Shega, J., W., Tiedt, A. D., Grant, K., & Dale, W. (2014). Pain measurement in the National Social Life, Health, and Aging Project: Presence, intensity, and location. *Journals of Gerontology, Series B: Psychological Sciences and Social Sciences, 69*(8), S191–S197.

486 American Geriatrics Society Panel on the Pharmacological Management of Persistent Pain in Older Persons. (2009). Pharmacological management of persistent pain in older persons. *Journal of the American Geriatrics Society, 57,* 1331–1346.

487 American Geriatrics Society Panel on the Pharmacological Management of Persistent Pain in Older Persons. (2009). Pharmacological management of persistent pain in older persons. *Journal of the American Geriatrics Society, 57,* 1331–1346.

488 American Geriatrics Society Panel on the Pharmacological Management of Persistent Pain in Older Persons. (2009). Pharmacological management of persistent pain in older persons. *Journal of the American Geriatrics Society, 57,* 1331–1346.

489 American Geriatrics Society Panel on the Pharmacological Management of Persistent Pain in Older Persons. (2009). Pharmacological Management of Persistent Pain in Older Persons. *Journal of the American Geriatrics Society, 57,* 1331–1346.

490 Centers for Disease Control and Prevention, National Center for Health Statistics. (2020). *Multiple cause of death data 1999-2018 on CDC WONDER* [Data set]. Retrieved April 14, 2020, from https://wonder.cdc.gov/mcd.html

491 Centers for Disease Control and Prevention, National Center for Health Statistics. (2020). *Multiple cause of death data 1999-2018 on CDC WONDER* [Data set]. Retrieved April 14, 2020, from https://wonder.cdc.gov/mcd.html

492 McGuire, B. E., Nicholas, M. K., Asghari, A., Wood, B. M., & Main, C. J. (2014). The effectiveness of psychological treatments for chronic pain in older adults: Cautious optimism and an agenda for research. *Current Opinion in Psychiatry, 27*(5), 380–384.

493 Reid, M. C., Ong, A. D., & Henderson, C. R. (2016). Why we need nonpharmacologic approaches to manage chronic low back pain in older adults. *JAMA Internal Medicine, 176*(3), 338–339. doi: 10.1001/jamainternmed.2015.8348.

494 Davies, P. S. (2017). Opioids for pain management in older adults: Strategies for safe prescribing. *Nurse Practitioner, 42*(2), 20–26.

495 Dowell, D., Haegerich, T. M., & Chou, R. (2016). CDC guideline for prescribing opioids for chronic pain: United States, 2016. *JAMA, 315*(15), 1624–1645.

496 Dowell, D., Haegerich, T. M., & Chou, R. (2016). CDC guideline for prescribing opioids for chronic pain: United States, 2016. *JAMA, 315*(15), 1624–1645.

[497] Ali, A., Arif, A. W., Bhan, C., Kumar, D., Malik, M. B., Sayyed, Z., … Ahmad, M. Q. (2018). Managing chronic pain in the elderly: An overview of the recent therapeutic advancements. *Cureus, 10*(9), e3293.

[498] Makris, U. E., Abrams, R. C., Gurland, B., & Reid, M. C. (2014). Management of persistent pain in the older patient: A clinical review. *JAMA, 312*(8), 825–836.

[499] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[500] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[501] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[502] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[503] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[504] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[505] Lai, H. M., Cleary, M., Sitharthan, T., & Hunt, G. E. (2015). Prevalence of comorbid substance use, anxiety and mood disorders in epidemiological surveys, 1990–2014: A systematic review and meta-analysis. *Drug and Alcohol Dependence, 154,* 1–13.

[506] Fink, D. S., Hu, R., Cerdá, M., Keyes, K. M., Marshall, B. D., Galea, S., & Martins, S. S. (2015). Patterns of major depression and nonmedical use of prescription opioids in the United States. *Drug and Alcohol Dependence, 153,* 258–264.

[507] Dworkin, E. R., Wanklyn, S., Stasiewicz, P. R., & Coffey, S. F. (2018). PTSD symptom presentation among people with alcohol and drug use disorders: Comparisons by substance of abuse. *Addictive Behaviors, 76,* 188–194.

[508] Pietrzak, R. H., Goldstein, R. B., Southwick, S. M., & Grant, B. F. (2011). Prevalence and Axis I comorbidity of full and partial posttraumatic stress disorder in the United States: Results from Wave 2 of the National Epidemiologic Survey on Alcohol and Related Conditions. *Journal of Anxiety Disorders, 25*(3), 456–465.

[509] Espinoza, R., & Kaufman, A. H. (2014). Diagnosis and treatment of late-life depression. *Psychiatric Times, 31*(10), 1–8.

[510] Lagana, L. (2009). Pilot testing a new short screen for the assessment of older women's PTSD symptomatology. *Educational Gerontology, 35*(8), 732–751.

[511] Jeste, D. V., Peschin, S., Buckwalter, K., Blazer, D. G., McGuire, M., Moutier, C., … Reynolds, C. F. (2018). Promoting wellness in older adults with mental illnesses and substance use disorders: Call to action to all stakeholders. *American Journal of Geriatric Psychiatry, 26*(6), 617–630.

[512] Soper, R. G. (2014, October 6). Intimate partner violence and co-occurring substance abuse/addiction. *ASAM Magazine.* Retrieved from www.asam.org/resources/publications/magazine/read/article/2014/10/06/intimate-partner-violence-and-co-occurring-substance-abuse-addiction

[513] Lachs, M., & Pillemer, K. (2015). Elder abuse. *New England Journal of Medicine, 373,* 1947–1956.

[514] Stone, A. L., Becker, L. G., Huber, A. M., & Catalano, R. F. (2012). Review of risk and protective factors of substance use and problem use in emerging adulthood. *Addictive Behaviors, 37*(7), 747–775.

[515] Urbanoski, K. A., & Kelly, J. F. (2012). Understanding genetic risk for substance use and addiction: A guide for non-geneticists. *Clinical Psychology Reviews, 32*(1), 60–70.

[516] Urbanoski, K. A., & Kelly, J. F. (2012). Understanding genetic risk for substance use and addiction: A guide for non-geneticists. *Clinical Psychology Reviews, 32*(1), 60–70.

[517] Hummel, A., Shelton, K. H., Heron, J., Moore, L., & van den Bree, M. B. (2013). A systematic review of the relationships between family functioning, pubertal timing and adolescent substance use. *Addiction, 108*(3), 487–496.

[518] Katz, S., Ford, A. B., Moskowitz, R. W., Jackson, B. A., & Jaffe, M. W. (1963). Studies of illness in the aged: The Index of ADL; a standardized measure of biological and psychosocial function. *JAMA, 185*(12), 914–919.

519 Mahoney, F., & Barthel, D. (1965). Functional evaluation: The Barthel Index. *Maryland State Medical Journal, 14,* 61–65.

520 NINDS Common Data Elements. (n.d.). Report Viewer [for Barthel Index]. Retrieved from www.commondataelements.ninds.nih.gov/report-viewer/23804/www.mapi-trust.org

521 Pfeffer, R. I., Kurosaki, T. T., Harrah, C. H., Chance, J. M., & Filos, S. (1982). Measurement of functional activities in older adults in the community. *Journal of Gerontology, 37*(3), 323–329.

522 Marshall, G. A., Zoller, A. S., Lorius, N., Amariglio, R. E., Locascio, J. J., Johnson, K. A., … Alzheimer's Disease Neuroimaging Initiative. (2015). Functional Activities Questionnaire items that best discriminate and predict progression from clinically normal to mild cognitive impairment. *Current Alzheimer Research, 12*(5), 493.

523 Centers for Disease Control and Prevention. (2016, September 22). Falls are leading cause of injury and death in older Americans. Retrieved April 11, 2019, from www.cdc.gov/media/releases/2016/p0922-older-adult-falls.html

524 Centers for Disease Control and Prevention. (2016). Older adult falls data. Retrieved February 12, 2018, from www.cdc.gov/homeandrecreationalsafety/falls/fallcost.html

525 Bergen, G., Stevens, M. R., & Burns, E. R. (2016). Falls and fall injuries among adults aged ≥65 years — United States, 2014. *MMWR: Morbidity and Mortality Weekly Report, 65*(37), 993–998.

526 Burns, E. B., Stevens, J. A., & Lee, R. L. (2016). The direct costs of fatal and non-fatal falls among older adults: United States. *Journal of Safety Research, 58,* 99–103.

527 Choi, N. G., DiNitto, D. M., Marti, C. N., & Choi, B. Y. (2015). Associations of mental health and substance use disorders with presenting problems and outcomes in older adults' emergency department visits. *Academic Emergency Medicine, 22*(11), 1316–1326.

528 Ambrose, A. F., Paul, G., & Hausdorff, J. M. (2013). Risk factors for falls among older adults: A review of the literature. *Maturitas 75*(1), 51–61.

529 Arora, A., O'Neill, A., Crome, P., & Martin, F. C. (2015). Clinical medicine and substance misuse: Research, assessments and treatment. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 35–55). Hoboken, NJ: Wiley-Blackwell.

530 Richardson, K., Bennett, K., & Kenny, R. A. (2015). Polypharmacy including falls risk-increasing medications and subsequent falls in community-dwelling middle-aged and older adults. *Age and Ageing, 44*(1), 90–96.

531 Stone, K. L., Blackwell, T. L., Ancoli-Israel, S., Cauley, J. A., Redline, S., Marshall, L. M., & Ensrud, K. E. (2014). Sleep disturbances and risk of falls in older community-dwelling men: The outcomes of Sleep Disorders in Older Men (MrOS Sleep) Study. *Journal of the American Geriatrics Society, 62*(2), 299–305.

532 Hayley, A. C., Williams, L. J., Kennedy, G. A., Holloway, K. L., Berk, M., Brennan-Olsen, S. L., & Pasco, J. A. (2015). Excessive daytime sleepiness and falls among older men and women: Cross-sectional examination of a population-based sample. *BMC Geriatrics, 15,* 74.

533 Panel on Prevention of Falls in Older Persons, American Geriatrics Society and British Geriatrics Society.(2011). Summary of the updated American Geriatrics Society/British Geriatrics Society clinical practice guideline for prevention of falls in older persons. *Journal of the American Geriatrics Society, 59*(1), 148–157.

534 American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

535 American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

536 American Association of Community Psychiatrists. (2016). *LOCUS: Level of Care Utilization System for Psychiatric and Addiction Services Adult Version 20.* Retrieved from www.communitypsychiatry.org/resources/locus

537 National Guardianship Association. (2013). *Standards of practice* (4th ed.). Retrieved from www.guardianship.org/wp-content/uploads/2017/07/NGA-Standards-with-Summit-Revisions-2017.pdf

538 Wilkins, J. M. (2017). Dementia, decision making, and quality of life. *AMA Journal of Ethics, 19,* 637–639.

539 Friedrichs, A., Spies, M., Härter, M., & Buchholz, A. (2016). Patient preferences and shared decision making in the treatment of substance use disorders: A systematic review of the literature. *PLoS One, 11*(1), e0145817.

540 Friedrichs, A., Spies, M., Härter, M., & Buchholz, A. (2016). Patient preferences and shared decision making in the treatment of substance use disorders: A systematic review of the literature. *PLoS One, 11*(1), e0145817

541 Elwyn, G., Dehlendorf, C., Epstein, R. M., Marrin, K., White, J., & Frosch, D. L. (2014). Shared decision making and motivational interviewing: Achieving patient-centered care across the spectrum of health care problems. *Annals of Family Medicine, 12*(3), 270–275.

[542] Substance Abuse and Mental Health Services Administration. (2019). *Enhancing motivation for change in substance use disorder treatment.* Treatment Improvement Protocol (TIP) Series 35. HHS Publication No. PEP19-02-01-003. Rockville, MD: Substance Abuse and Mental Health Services Administration.

[543] Purath, J., Keck, A., & Fitzgerald, C. (2014). Motivational interviewing for older adults in primary care: A systematic review. *Geriatric Nursing, 35*(3), 219–224.

[544] Elwyn, G., Dehlendorf, C., Epstein, R. M., Marrin, K., White, J., & Frosch, D. L. (2014). Shared decision making and motivational interviewing: Achieving patient-centered care across the spectrum of health care problems. *Annals of Family Medicine, 12*(3), 270–275.

[545] Sahker, E., Schultz, S. K., & Arndt, S. (2015). Treatment of substance use disorders in older adults: Implications for care delivery. *Journal of the American Geriatrics Society, 63*(11), 2317–2323.

[546] Kuerbis, A., & Sacco, P. (2013). A review of existing treatments for substance abuse among the elderly and recommendations for future directions. *Substance Abuse, 7,* 13–37.

[547] Sahker, E., Schultz, S. K., & Arndt, S. (2015). Treatment of substance use disorders in older adults: Implications for care delivery. *Journal of the American Geriatrics Society, 63*(11), 2317–2323.

[548] Carew, A. M., & Comiskey, C. (2018). Treatment for opioid use and outcomes in older adults: A systematic literature review. *Drug and Alcohol Dependence, 182,* 48–57.

[549] Kuerbis, A., & Sacco, P. (2013). A review of existing treatments for substance abuse among the elderly and recommendations for future directions. *Substance Abuse, 7,* 13–37.

[550] Kuerbis, A., & Sacco, P. (2013). A review of existing treatments for substance abuse among the elderly and recommendations for future directions. *Substance Abuse, 7,* 13–37.

[551] Moy, I., Crome, P., Crome, I., & Fisher, M. (2011). Systematic and narrative review of treatment for older people with substance problems. *European Geriatric Medicine, 358,* 212–236.

[552] Bhatia, U., Nadkarni, A., Murthy, P., Rao, R., & I. Crome. (2015). Recent advances in treatment for older people with substance use problems: An updated systematic and narrative review. *European Geriatric Medicine, 358,* 580–586.

[553] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[554] Aalto, M., Alho, H., Halme, J. T., & Seppä, K. (2011). The Alcohol Use Disorders Identification Test (AUDIT) and its derivatives in screening for heavy drinking among the elderly. *International Journal of Geriatric Psychiatry, 26*(9), 881–885.

[555] Barbor, T. F., Higgins-Biddle, J. C., Saunders, J. B., & Monteiro, M. G. (2001). *AUDIT: The Alcohol Use Disorders Identification Test: Guidelines for use in primary care* (2nd ed., p. 17). Geneva, Switzerland: World Health Organization.

[556] Bush, K., Kivlahan, D. R., McDonell, M. B., Fihn, S. D., & Bradley, K. A. (1998). The AUDIT alcohol consumption questions (AUDIT-C): An effective brief screening test for problem drinking. Ambulatory Care Quality Improvement Project (ACQUIP). *Archives of Internal Medicine, 158,* 1789–1795.

[557] U.S. Department of Veterans Affairs. (n.d.). AUDIT-C Frequently Asked Questions. Retrieved from www.queri.research.va.gov/tools/alcohol-misuse/alcohol-faqs.cfm#top

[558] Blow, F. C., et al. (1998). Brief screening for alcohol problems in elderly populations using the Short Michigan Alcoholism Screening Test-Geriatric Version (SMAST-G). Hilton Head Island, SC: Research Society on Alcoholism Annual Scientific Meeting.

[559] Purcell, B. (2003). *Senior Alcohol Misuse Indicator.* Toronto, Canada: Centre for Addiction and Mental Health, University of Toronto.

[560] Adamson, S. J., Kay-Lambkin, F. J., Baker, A. L., Lewin, T. J., Thornton, L., Kelly, B. J., & Sellman, J. D. (2010). An improved brief measure of cannabis misuse: The Cannabis Use Disorders Identification Test–Revised (CUDIT-R). *Drug and Alcohol Dependence, 110,* 137–143.

[561] Meyer, T., Miller, M., Metzger, R., & Borkovec, T. D. (1990). Development and validation of the Penn State Worry Questionnaire. *Behaviour Research and Therapy, 28,* 487–495.

[562] Therrien, Z., & Hunsley, J. (2012). Assessment of anxiety in older adults: A systematic review of commonly used measures, *Aging and Mental Health, 16*(1), 1–16.

[563] Prins, A., Bovin, M. J., Kimerling, R., Kaloupek, D. G., Marx, B. P., Pless Kaiser, A., & Schnurr, P. P. (2015). The Primary Care PTSD Screen for DSM-5 (PC-PTSD-5). Retrieved from www.ptsd.va.gov/professional/assessment/screens/pc-ptsd.asp

[564] Prins, A., Bovin, M. J., Smolenski, D. J., Marx, B. P., Kimerling, R., Jenkins-Guarnieri, M. A., … Tiet, Q. Q. (2016). The Primary Care PTSD Screen for DSM-5 (PC-PTSD-5): Development and evaluation within a veteran primary care sample. *Journal of General Internal Medicine, 31*(10), 1206–1211.

[565] Ware, L. J., Herr, K. A., Booker, S. S., Dotson, K., Key, J., Poindexter, N., … Packard, A. (2015). Psychometric evaluation of the revised Iowa Pain Thermometer (IPT-R) in a sample of diverse cognitively intact and impaired older adults: A pilot study. *Pain Management Nursing, 16*(4), 475–482.

[566] Katz, S., Down, T. D., Cash, H. R., & Grotz, R. C. (1970). Progress in the development of the index of ADL. *Gerontologist, 10,* 20–30.

[567] Grant, B. F., Chou, S. P., Saha, T. D., Pickering, R. P., Kerridge, B. T., Ruan, W. J., … Hasin, D. S. (2017). Prevalence of 12-month alcohol use, high-risk drinking, and DSM-IV Alcohol Use Disorder in the United States, 2001–2002 to 2012–2013: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. *JAMA Psychiatry, 74*(9), 911–923.

[568] National Institute on Alcohol Abuse and Alcoholism. (n.d.). Drinking levels defined. Retrieved from www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

[569] U.S. Department of Health and Human Services & U.S. Department of Agriculture. (2015). *2015–2020 Dietary Guidelines for Americans* (8th ed.). Retrieved from https://health.gov/our-work/food-nutrition/2015-2020-dietary-guidelines

[570] American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

[571] National Institute on Alcohol Abuse and Alcoholism. (n.d.). Drinking levels defined. Retrieved from www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

[572] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[573] Kaiser Permanente. (2019). Alcohol use in older adults. Retrieved from https://wa.kaiserpermanente.org/healthAndWellness/index.jhtml?item=%2Fcommon%2FhealthAndWellness%2FhealthyLiving%2Flifestyle%2Falcohol-seniors.html

[574] Family Caregiver Alliance. (2019). Caregiver statistics: Demographics. Retrieved from www.caregiver.org/caregiver-statistics-demographics

[575] Drugs.com. (2018). What are drug interactions? Retrieved August 27, 2018, from www.drugs.com/drug_interactions.html

[576] World Health Organization. (2018). Lexicon of alcohol and drug terms published by the World Health Organization, Management of Substance Abuse. Retrieved from www.who.int/substance_abuse/terminology/who_lexicon/en/

[577] World Health Organization. (2018). Lexicon of alcohol and drug terms published by the World Health Organization, Management of Substance Abuse. Retrieved from www.who.int/substance_abuse/terminology/who_lexicon/en/

[578] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[579] U.S. Department of Health and Human Services & U.S. Department of Agriculture. (2015). *2015–2020 Dietary Guidelines for Americans* (8th ed.). Retrieved from https://health.gov/our-work/food-nutrition/2015-2020-dietary-guidelines

[580] National Institute on Alcohol Abuse and Alcoholism. (n.d.). Drinking levels defined. Retrieved from www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

[581] Centers for Disease Control and Prevention. (2018). Alcohol and Public Health. Frequently Asked Questions. Retrieved from www.cdc.gov/alcohol/faqs.htm

[582] U.S. Department of Health and Human Services & U.S. Department of Agriculture. (2015). *2015–2020 Dietary Guidelines for Americans* (8th ed.). Retrieved from https://health.gov/our-work/food-nutrition/2015-2020-dietary-guidelines

[583] American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

[584] American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

[585] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[586] Barry, K. L., & Blow, F. C. (2016). Drinking over the lifespan: Focus on older adults. *Alcohol Research: Current Reviews, 38*(1), 115–120.

[587] DiBartolo, M. C., & Jarosinski, J. M. (2017). Alcohol use disorder in older adults: Challenges in assessment and treatment. *Issues in Mental Health Nursing, 38*(1), 25–32.

[588] Barry, K. L., & Blow, F. C. (2016). Drinking over the lifespan: Focus on older adults. *Alcohol Research: Current Reviews, 38*(1), 115–120.

[589] Arndt, S., & Schultz, S. K. (2015). Epidemiology and demography of alcohol and the older person. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people.* (pp. 75–90). West Sussex, UK: Wiley-Blackwell.

590 Wilson, S. R., Knowles, S. B., Huang, Q., & Fink, A. (2014). The prevalence of harmful and hazardous alcohol consumption in older U.S. adults: Data from the 2005–2008 National Health and Nutrition Examination Survey (NHANES). *Journal of General Internal Medicine, 29*(2), 312–319.

591 Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

592 Simou, E., Britton, J., & Leonardi-Bee, J. (2018). Alcohol and the risk of sleep apnoea: A systematic review and meta-analysis. *Sleep Medicine, 42*(2018), 38–46.

593 Grant, B. F., Chou, S. P., Saha, T. D., Pickering, R. P., Kerridge, B. T., Ruan, W. J., … Hasin, D. S. (2017). Prevalence of 12-month alcohol use, high-risk drinking, and DSM-IV alcohol use disorder in the United States, 2001–2002 to 2012–2013: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. *JAMA Psychiatry, 74*(9), 911–923. doi:10.1001/jamapsychiatry.2017.2161

594 Barry, K. L., & Blow, F. C. (2016). Drinking over the lifespan: Focus on older adults. *Alcohol Research: Current Reviews, 38*(1), 115–120.

595 Barry, K. L., & Blow, F. C. (2016). Drinking over the lifespan: Focus on older adults. *Alcohol Research: Current Reviews, 38*(1), 115–120.

596 Ramchandani, V. A., Slattum, P. W., Patkar, A. A., Wu, L.-T., Lee, J. C., Mohanty, M., … Li, T.-K. (2014). Psychopharmacology and the consequences of alcohol and drug interactions. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 149–170). West Sussex, UK: Wiley-Blackwell.

597 Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

598 Chernick, R., & Kuerbis, A. (2016). Social and familial contexts for drinking among older adults. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 149–166). New York, NY: Springer.

599 Schonfeld, L. (2016). Adapting SBIRT for older adults. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 215–232). New York, NY: Springer.

600 Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

601 National Institute on Alcohol Abuse and Alcoholism. (n.d.). Drinking levels defined. Retrieved from www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

602 Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

603 Arndt, S., & Schultz, S. K. (2015). Epidemiology and demography of alcohol and the older person. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 75–90). West Sussex, UK: Wiley-Blackwell.

604 Han, B. H., Moore, A. A., Sherman, S., Keyes, K. M., & Palamar, J. J. (2017). Demographic trends of binge alcohol use and alcohol use disorders among older adults in the United States, 2005–2014. *Drug and Alcohol Dependence, 170,* 198–207.

605 Arndt, S., & Schultz, S. K. (2015). Epidemiology and demography of alcohol and the older person. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 75–90). West Sussex, UK: Wiley-Blackwell.

606 Barry, K. L., & Blow, F. C. (2016). Drinking over the lifespan: Focus on older adults. *Alcohol Research: Current Reviews, 38*(1), 115–120.

607 Chou, K. L., Liang, K., & Mackenzie, C. S. (2011). Binge drinking and Axis I psychiatric disorders in community-dwelling middle-aged and older adults: Results from the National Epidemiology Survey on Alcohol and Related Conditions (NESARC). *Journal of Clinical Psychiatry, 72*(5), 640–647.

608 Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

609 Grant, B. F., Chou, S. P., Saha, T. D., Pickering, R. P., Kerridge, B. T., Ruan, W. J., … Hasin, D. S. (2017). Prevalence of 12-month alcohol use, high-risk drinking, and DSM-IV alcohol use disorder in the United States, 2001–2002 to 2012–2013: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. *JAMA Psychiatry, 74*(9), 911–923.

610 U.S. Census Bureau. (2017). *2017 national population projections tables: Main series* (Table 2). Retrieved April 17, 2020, from www.census.gov/data/tables/2017/demo/popproj/2017-summary-tables.html

[611] U.S. Census Bureau. (2019, October 8). *Older people projected to outnumber children for first time in U.S. history* [Revised press release]. Retrieved April 14, 2020, from www.census.gov/newsroom/press-releases/2018/cb18-41-population-projections.html

[612] Arndt, S., & Schultz, S. K. (2015). Epidemiology and demography of alcohol and the older person. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 75–90). West Sussex, UK: Wiley-Blackwell.

[613] Caputo, F., Vignoli, T., Leggio, L., Addolorato, G., Zoli, G., & Bernardi, M. (2012). Alcohol use disorders in the elderly: A brief overview from epidemiology to treatment options. *Experimental Gerontology, 47*(6), 411–416.

[614] Arndt, S., & Schultz, S. K. (2015). Epidemiology and demography of alcohol and the older person. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people.* (pp. 75–90). West Sussex, UK: Wiley-Blackwell.

[615] Bryant, C., Jackson, H., & Ames, D. (2008). The prevalence of anxiety in older adults: Methodological issues and a review of the literature. *Journal of Affective Disorders, 109*(3), 233–250.

[616] Wolitzky-Taylor, K. B., Castriotta, N., Lenze, E. J., Stanley, M. A., & Craske, M. G. (2010). Anxiety disorders in older adults: A comprehensive review. *Depression and Anxiety, 27*(2), 190–211.

[617] Bryant, C., Jackson, H., & Ames, D. (2008). The prevalence of anxiety in older adults: Methodological issues and a review of the literature. *Journal of Affective Disorders, 109*(3), 233–250.

[618] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[619] Meeks, T. W., Vahia, I. V., Lavretsky, H., Kulkarni, G., & Jeste, D. V. (2011). A tune in "A minor" can "B major": A review of epidemiology, illness course, and public health implications of subthreshold depression in older adults. *Journal of Affective Disorders, 129*(1–3), 126–142.

[620] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

[621] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

[622] Wilson, D., Jackson, S., Crome, I. B., Rao, R. T., & Crome, P. (2015). Comprehensive geriatric assessment and the special needs of older people. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 171–191). West Sussex, UK: Wiley-Blackwell.

[623] Osterweil, N. (2012, November 12). Older adults with schizophrenia can achieve remission. *Clinical Psychiatry News.* Retrieved from www.mdedge.com/clinicalpsychiatrynews/article/56692/schizophrenia-other-psychotic-disorders/older-adults

[624] Lane, S. D., da Costa, S. C., Teixeira, A. L., Reynolds, C. F., & Diniz, B. S. (2018). The impact of substance use disorders on clinical outcomes in older-adult psychiatric inpatients. *International Journal of Geriatric Psychiatry, 33*(2), e323–e329.

[625] Patel, K. V., Guralnik, J. M., Dansie, E. J., & Turk, D. C. (2013). Prevalence and impact of pain among older adults in the United States: Findings from the 2011 National Health and Aging Trends Study. *Pain, 154*(12), 2649–2657.

[626] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

[627] Barry, K. L., & Blow, F. C. (2016). Drinking over the lifespan: Focus on older adults. *Alcohol Research: Current Reviews, 38*(1), 115–120.

[628] DiBartolo, M. C., & Jarosinski, J. M. (2017). Alcohol use disorder in older adults: Challenges in assessment and treatment. *Issues in Mental Health Nursing, 38*(1), 25–32.

[629] Klein, W. C., & Jess, C. (2002). One last pleasure? Alcohol use among elderly people in nursing homes. *Health and Social Work, 27*(3), 193–203.

[630] Barry, K. L., & Blow, F. C. (2016). Drinking over the lifespan: Focus on older adults. *Alcohol Research: Current Reviews, 38*(1), 115–120.

[631] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[632] Massachusetts Department of Public Health, Bureau of Substance Abuse Services. (2015). Alcohol and medication issues for older adults. Retrieved from http://files.hria.org/files/SA1003.pdf

[633] Blow, F. C., et al. (1998). Brief screening for alcohol problems in elderly populations using the Short Michigan Alcoholism Screening Test-Geriatric Version (SMAST-G). Hilton Head Island, SC: Research Society on Alcoholism Annual Scientific Meeting.

[634] Barry, K. L., & Blow, F. C. (2016). Drinking over the lifespan: Focus on older adults. *Alcohol Research: Current Reviews, 38*(1), 115–120.

[635] Barbor, T. F., Higgins-Biddle, J. C., Saunders, J. B., & Monteiro, M. G. (2001). *AUDIT: The Alcohol Use Disorders Identification Test: Guidelines for use in primary care* (2nd ed.). Geneva, Switzerland: World Health Organization. Retrieved from http://apps.who.int/iris/bitstream/10665/67205/1/WHO_MSD_MSB_01.6a.pdf

[636] Aalto, M., Alho, H., Halme, J. T., & Seppă, K. (2011). The Alcohol Use Disorders Identification Test (AUDIT) and its derivatives in screening for heavy drinking among the elderly. *International Journal of Geriatric Psychiatry, 26*(9), 881–885. doi:10.1002/gps.2498

[637] Barry, K. L., & Blow, F. C. (2016). Drinking over the lifespan: Focus on older adults. *Alcohol Research: Current Reviews, 38*(1), 115–120.

[638] Blow, F. C., & Barry, K. L. (2012). Alcohol and substance misuse in older adults. *Current Psychiatry Reports, 14*(4), 310–319.

[639] Arndt, S., & Schultz, S. K. (2015). Epidemiology and demography of alcohol and the older person. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 75–90). West Sussex, UK: Wiley-Blackwell.

[640] Substance Abuse and Mental Health Services Administration. (2017). *A guide to preventing older adult alcohol and psychoactive medication misuse/abuse: Screening and brief interventions.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.ncoa.org/wp-content/uploads/SBIRT-Older-Adult-Manual-Final.pdf

[641] Substance Abuse and Mental Health Services Administration. (2017). *A guide to preventing older adult alcohol and psychoactive medication misuse/abuse: Screening and brief interventions.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.ncoa.org/wp-content/uploads/SBIRT-Older-Adult-Manual-Final.pdf

[642] Sacco, P. (2016). Understanding alcohol consumption patterns among older adults: Continuity and change. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 19–34). New York, NY: Springer.

[643] American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

[644] Moore, A. A., Kuerbis, A., Sacco, P., Chen, G. I., & Garcia, M. B. (2016). Screening and assessment of unhealthy alcohol use in older adults. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 169–180). New York, NY: Springer.

[645] Barry, K. L., Blow, F. C., & Oslin, D. W. (2002). Substance abuse in older adults: Review and recommendations for education and practice in medical settings. *Substance Abuse, 23*(3 Suppl.), 105–131.

[646] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[647] Satre, D. D. (2015). Alcohol and drug use problems among older adults. *Clinical Psychology: Science and Practice, 22*(3), 238–254.

[648] Alpert, P. T. (2014). Alcohol abuse in older adults: An invisible population. *Home Health Care Management and Practice, 26*(4), 269–272.

[649] Barry, K. L., & Blow, F. C. (2016). Drinking over the lifespan: Focus on older adults. *Alcohol Research: Current Reviews, 38*(1), 115–120.

[650] Fink, A., Morton, S. C., Beck, J. C., Hays, R. D., Spritzer, K., Oishi, S. M., & Moore, A. A. (2002). The Alcohol-Related Problems Survey: Identifying hazardous and harmful drinking in older primary care patients. *Journal of American Geriatrics Society, 50,* 1717–1722.

[651] Moore, A. A., Kuerbis, A., Sacco, P., Chen, G. I., & Garcia, M. B. (2016). Screening and assessment of unhealthy alcohol use in older adults. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 169–180). New York, NY: Springer.

[652] Barnes, A. J., Moore, A. A., Xu, H., Ang, A., Tallen, L., Mirkin, M., & Ettner, S. L. (2010). Prevalence and correlates of at-risk drinking among older adults: The Project SHARE study. *Journal of General Internal Medicine, 25*(8), 840–846.

[653] Cummings, S. M., Bride, B., Cassie, K. M., & Rawlins-Shaw, A. (2009). Substance abuse. In S. M. Cummings & N. P. Kropf (Eds.), *Handbook of psychosocial interventions with older adults: Evidence-based approaches* (pp. 215–241). New York, NY: Haworth Press.

[654] Emiliussen, J., Søgaard Nielsen, A., & Andersen, K. (2017). Identifying risk factors for late-onset (50+) alcohol use disorder and heavy drinking: A systematic review. *Substance Use and Misuse, 52*(12), 1575–1588.

[655] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[656] Slattum, P. W., & Hassan, O. E. (2016). Medications, alcohol, and aging. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 117–129). New York, NY: Springer.

[657] Barnes, A. J., Moore, A. A., Xu, H., Ang, A., Tallen, L., Mirkin, M., & Ettner, S. L. (2010). Prevalence and correlates of at-risk drinking among older adults: The Project SHARE study. *Journal of General Internal Medicine, 25*(8), 840–846.

[658] Gilson, K. M., Bryant, C., & Judd, F. (2017). Understanding older problem drinkers: The role of drinking to cope. *Addictive Behaviors, 64,* 101–106.

[659] Breslow, R., Dong, C., & White, A. (2015). Prevalence of alcohol-interactive prescription medication use among current drinkers: United States, 1999 to 2010. *Alcoholism, 39,* 371–379.

[660] Slattum, P. W., & Hassan, O. E. (2016). Medications, alcohol, and aging. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 117–129). New York, NY: Springer.

[661] DiBartolo, M. C., & Jarosinski, J. M. (2017). Alcohol use disorder in older adults: Challenges in assessment and treatment. *Issues in Mental Health Nursing, 38*(1), 25–32.

[662] Oslin, D. W., & Zanjani, F. (2016). Treatment of unhealthy alcohol use in older adults. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 181–199). New York, NY: Springer.

[663] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

[664] Oslin, D. W., & Zanjani, F. (2016). Treatment of unhealthy alcohol use in older adults. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 181–199). New York, NY: Springer.

[665] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

[666] Moore, A. A., Blow, F. C., Hoffing, M., Welgreen, S., Davis, J. W., Lin, J. C., … Barry, K. L. (2011). Primary care-based intervention to reduce at-risk drinking in older adults: A randomized controlled trial. *Addiction, 106*(1), 111–120.

[667] Oslin, D. W., & Zanjani, F. (2016). Treatment of unhealthy alcohol use in older adults. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), Alcohol and aging: *Clinical and public health perspectives* (pp. 181–199). New York, NY: Springer.

[668] Blow, F. C., & Barry, K. L. (2000). Older patients with at-risk and problem drinking patterns: New developments in brief interventions. *Journal of Geriatric Psychiatry and Neurology, 13*(3), 115–123.

[669] Moore, A. A., Blow, F. C., Hoffing, M., Welgreen, S., Davis, J. W., Lin, J. C., … Barry, K. L. (2011). Primary care-based intervention to reduce at-risk drinking in older adults: A randomized controlled trial. *Addiction, 106*(1), 111–120.

[670] Moore, A. A., Blow, F. C., Hoffing, M., Welgreen, S., Davis, J. W., Lin, J. C., … Barry, K. L. (2011). Primary care-based intervention to reduce at-risk drinking in older adults: A randomized controlled trial. *Addiction, 106*(1), 111–120.

[671] Miller, W. R., Forcehimes, A., & Zweben, A. (2011). *Treating addiction: A guide for professionals.* New York, NY: Guilford Press.

[672] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

[673] Satre, D. D., & Leibowitz, A. (2015). Brief alcohol and drug interventions and motivational interviewing for older adults. In P. A. Areán (Ed.), *Treatment of late-life depression, anxiety, trauma, and substance abuse* (pp. 163–180). Washington, DC: American Psychological Association.

[674] Serdarevic, M. (2016). Literature review: Motivational interviewing with the older adult. *Journal of Psychology and Clinical Psychiatry, 6*(7), 00409. doi:10.15406/jpcpy.2016.06.00409

[675] Satre, D. D., & Leibowitz, A. (2015). Brief alcohol and drug interventions and motivational interviewing for older adults. In P. A. Areán (Ed.), *Treatment of late-life depression, anxiety, trauma, and substance abuse* (pp. 163–180). Washington, DC: American Psychological Association.

[676] Cummings, S. M., Cooper, R. L., & Cassie, K. M. (2009). Motivational interviewing to affect behavioral change in older adults. *Research on Social Work Practice, 19*(2), 195–204.

[677] Lundahl, B., Moleni, T., Burke, B., Butters, R., Tollefson, D., Butler, C., & Rollnick, S. (2013). Motivational interviewing in medical care settings: A systematic review and meta-analysis of randomized controlled trials. *Patient Education and Counseling, 93*(2), 157–168.

[678] Kuerbis, A., Treloar Padovano, H., Shao, S., Houser, J., Muench, F., & Morgenstern, J. (2018). Comparing daily drivers of problem drinking among older and younger adults: An electronic daily diary study using smartphones. *Drug and Alcohol Dependence, 183,* 240–246.

[679] Miller, W. R., & Rollnick, S. (2013). *Motivational interviewing: Helping people change* (3rd ed.). New York, NY: Guilford Press.

[680] Miller, W. R., Forcehimes, A., & Zweben, A. (2011). *Treating addiction: A guide for professionals.* New York, NY: Guilford Press.

[681] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex: UK: Wiley-Blackwell.

[682] Miller, W. R., Forcehimes, A., & Zweben, A. (2011). *Treating addiction: A guide for professionals.* New York, NY: Guilford Press.

[683] Blow, F. C., & Barry, K. L. (2000). Older patients with at-risk and problem drinking patterns: New developments in brief interventions. *Journal of Geriatric Psychiatry and Neurology, 13*(3), 115–123.

[684] National Institute on Alcohol Abuse and Alcoholism. (n.d.). What's a "standard" drink? Retrieved June 14, 2019, from www.rethinkingdrinking.niaaa.nih.gov/How-much-is-too-much/What-counts-as-a-drink/Whats-A-Standard-Drink.aspx

[685] Miller, W. R., & Rollnick, S. (2013). *Motivational interviewing: Helping people change* (3rd ed.). New York, NY: Guilford Press.

[686] Magill, M., Stout, R. L., & Apodaca, T. R. (2013). Therapist focus on ambivalence and commitment: A longitudinal analysis of motivational interviewing treatment ingredients. *Psychology of Addictive Behaviors, 27*(3), 754–762.

[687] Magill, M., Kiluk, B. D., McCrady, B. S., Tonigan, J. S., & Longabaugh, R. (2015). Active ingredients of treatment and client mechanisms of change in behavioral treatments for alcohol use disorders: Progress 10 years later. *Alcoholism, Clinical and Experimental Research, 39*(10), 1852–1862.

[688] Magill, M., Gaume, J., Apodaca, T. R., Walthers, J., Mastroleo, N. R., Borsari, B., & Longabaugh, R. (2014). The technical hypothesis of motivational interviewing: A meta-analysis of MI's key causal model. *Journal of Consulting and Clinical Psychology, 82*(6), 973–983.

[689] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

[690] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

[691] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

[692] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

[693] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

[694] Substance Abuse and Mental Health Services Administration & National Institute on Alcohol Abuse and Alcoholism. (2015). *Medication for the treatment of alcohol use disorder: A brief guide.* HHS Publication No. (SMA) 15-4907. Retrieved from https://store.samhsa.gov/product/Medication-for-the-Treatment-of-Alcohol-Use-Disorder-A-Brief-Guide/SMA15-4907

[695] Substance Abuse and Mental Health Services Administration. (2019). *Get connected: Linking older adults with resources on medication, alcohol, and mental health.* HHS Publication No. (SMA) 03-3824. Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from https://store.samhsa.gov/product/Get-Connected-Linking-Older-Adults-with-Resources-on-Medication-Alcohol-and-Mental-Health-2019-Edition/SMA03-3824

[696] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

[697] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

[698] Kuerbis, A., & Sacco, P. (2013). A review of existing treatments for substance abuse among the elderly and recommendations for future directions. *Substance Abuse, 7*, 13–37.

[699] Satre, D. D., Knight, B. G., & David, S. (2006). Cognitive-behavioral interventions with older adults: Integrating clinical and gerontological research. *Professional Psychology: Research and Practice, 37*(5), 489–498.

[700] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

[701] Satre, D. D., Knight, B. G., & David, S. (2006). Cognitive-behavioral interventions with older adults: Integrating clinical and gerontological research. *Professional Psychology: Research and Practice, 37*(5), 489–498.

[702] Oslin, D. W., & Zanjani, F. (2016). Treatment of unhealthy alcohol use in older adults. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 181–199). New York, NY: Springer.

[703] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

[704] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[705] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[706] Satre, D. D. (2015). Alcohol and drug use problems among older adults. *Clinical Psychology: Science and Practice, 22*(3), 238–254.

[707] Satre, D. D., Knight, B. G., & David, S. (2006). Cognitive-behavioral interventions with older adults: Integrating clinical and gerontological research. *Professional Psychology: Research and Practice, 37*(5), 489–498.

[708] Substance Abuse and Mental Health Services Administration. (2005). *Substance abuse relapse prevention for older adults: A group treatment approach*. HHS Publication No. (SMA) 05-4053. Rockville, MD: Substance Abuse and Mental Health Services Administration. https://preventionlane.org/wp-content/uploads/2018/01/SMA05-4053.pdf

[709] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314-339). West Sussex, UK: Wiley-Blackwell.

[710] Center for Substance Abuse Treatment. (2005). *Substance abuse relapse prevention for older adults: A group treatment approach* (p. 23). HHS Publication No. (SMA) 05-4053. Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from https://preventionlane.org/wp-content/uploads/2018/01/SMA05-4053.pdf

[711] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

[712] Kiosses, D. N., & Alexopoulos, G. S. (2014). Problem-solving therapy in the elderly. *Current Treatment Options in Psychiatry, 1*(1), 15–26.

[713] Kiosses, D. N., & Alexopoulos, G. S. (2014). Problem-solving therapy in the elderly. *Current Treatment Options in Psychiatry, 1*(1), 15–26.

[714] Kiosses, D. N., & Alexopoulos, G. S. (2014). Problem-solving therapy in the elderly. *Current Treatment Options in Psychiatry, 1*(1), 15–26.

[715] Kiosses, D. N., & Alexopoulos, G. S. (2014). Problem-solving therapy in the elderly. *Current Treatment Options in Psychiatry, 1*(1), 15–26.

[716] Donovan, D. M., Ingalsbe, M. H., Benbow, J., & Daley, D. C. (2013). 12-Step interventions and mutual support programs for substance use disorders: An overview. *Social Work in Public Health, 28*(3–4), 313–332.

[717] Donovan, D. M., Ingalsbe, M. H., Benbow, J., & Daley, D. C. (2013). 12-Step interventions and mutual support programs for substance use disorders: An overview. *Social Work in Public Health, 28*(3–4), 313–332.

[718] Kelly, J. F., Stout, R. L., Magill, M., & Tonigan, J. S. (2011). The role of Alcoholics Anonymous in mobilizing adaptive social network changes: A prospective lagged mediational analysis. *Drug and Alcohol Dependence, 114*(2–3), 119–126.

[719] Kelly, J. F., Stout, R. L., Magill, M., Tonigan, J. S., & Pagano, M. E. (2011). Spirituality in recovery: A lagged mediational analysis of Alcoholics Anonymous' principal theoretical mechanism of behavior change. *Alcoholism, Clinical and Experimental Research, 35*(3), 454–463.

[720] Montes, K. S., & Tonigan, J. S. (2017). Does age moderate the effect of spirituality/religiousness in accounting for Alcoholics Anonymous benefit? *Alcoholism Treatment Quarterly, 35*(2), 96–112.

[721] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

[722] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[723] Substance Abuse and Mental Health Services Administration & National Institute on Alcohol Abuse and Alcoholism. (2015). *Medication for the treatment of alcohol use disorder: A brief guide*. HHS Publication No. (SMA) 15-4907. Retrieved from https://store.samhsa.gov/product/Medication-for-the-Treatment-of-Alcohol-Use-Disorder-A-Brief-Guide/SMA15-4907

[724] Klotz, U. (2009). Pharmacokinetics and drug metabolism in the elderly. *Drug Metabolism Reviews, 41*(2), 67–76.

[725] Lal, R., & Pattanayak, R. D. (2017). Alcohol use among the elderly: Issues and considerations. *Journal of Geriatric Mental Health, 4*(1), 4–10.

[726] Ramchandani, V. A., Slattum, P. W., Patkar, A. A., Li-Tzy, W., Lee, J. C., Mohanty, M., … Ting-Kai, L. (2015). Psychopharmacology and the consequences of alcohol and drug interactions. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 149–170). West Sussex, UK: Wiley-Blackwell.

[727] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[728] Witkiewitz, K., Saville, K., & Hamreus, K. (2012). Acamprosate for treatment of alcohol dependence: Mechanisms, efficacy, and clinical utility. *Therapeutics and Clinical Risk Management, 8,* 45–53.

[729] Hassell, C., Wilkins, K., & Trevisan, L. A. (2017). Pharmacology of geriatric substance use disorders: Considerations and future directions. *Current Treatment Options in Psychiatry, 4*(1), 102–115.

[730] Substance Abuse and Mental Health Services Administration & National Institute on Alcohol Abuse and Alcoholism. (2015). *Medication for the treatment of alcohol use disorder: A brief guide.* HHS Publication No. (SMA) 15-4907. Retrieved from https://store.samhsa.gov/product/Medication-for-the-Treatment-of-Alcohol-Use-Disorder-A-Brief-Guide/SMA15-4907

[731] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[732] Sinclair, J., Chambers, S., Shiles, C., & Baldwin, D. S. (2016). Safety and tolerability of pharmacological treatment of alcohol dependence: Comprehensive review of evidence. *Drug Safety, 39,* 627–645.

[733] Hassell C., Wilkins, K., & Trevisan, L. A. (2017). Pharmacology of geriatric substance use disorders: Considerations and future directions. *Current Treatment Options in Psychiatry, 4*(1), 102–115.

[734] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[735] Substance Abuse and Mental Health Services Administration & National Institute on Alcohol Abuse and Alcoholism. (2015). *Medication for the treatment of alcohol use disorder: A brief guide.* HHS Publication No. (SMA) 15-4907. Retrieved from https://store.samhsa.gov/product/Medication-for-the-Treatment-of-Alcohol-Use-Disorder-A-Brief-Guide/SMA15-4907

[736] Substance Abuse and Mental Health Services Administration. (2015). *Clinical use of extended-release injectable naltrexone in the treatment of opioid use disorder: A brief guide.* HHS Publication No. (SMA) 14-4892. Retrieved from https://store.samhsa.gov/product/Clinical-Use-of-Extended-Release-Injectable-Naltrexone-in-the-Treatment-of-Opioid-Use-Disorder-A-Brief-Guide/SMA14-4892R

[737] Substance Abuse and Mental Health Services Administration. (2015). *Clinical use of extended-release injectable naltrexone in the treatment of opioid use disorder: A brief guide.* HHS Publication No. (SMA) 14-4892. Retrieved from https://store.samhsa.gov/product/Clinical-Use-of-Extended-Release-Injectable-Naltrexone-in-the-Treatment-of-Opioid-Use-Disorder-A-Brief-Guide/SMA14-4892R

[738] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629-654.

[739] Hassell, C., Wilkins, K., & Trevisan, L. A. (2017). Pharmacology of geriatric substance use disorders: Considerations and future directions. *Current Treatment Options in Psychiatry, 4*(1), 102–115.

[740] Le Roux, C., Tang, Y., & Drexler, K. (2016). Alcohol and opioid use disorder in older adults: Neglected and treatable illnesses. *Current Psychiatry Reports, 18,* 87.

[741] Lal, R., & Pattanayak, R. D. (2017). Alcohol use among the elderly: Issues and considerations. *Journal of Geriatric Mental Health, 4*(1), 4–10.

[742] Lal, R., & Pattanayak, R. D. (2017). Alcohol use among the elderly: Issues and considerations. *Journal of Geriatric Mental Health, 4*(1), 4–10.

[743] Friedmann, P. D. (2013). Alcohol use in adults. *New England Journal of Medicine, 368*(17), 1655–1656.

[744] Bommersbach, T. J., Lapid, M. I., Rummans, T. A., & Morse, R. M. (2015). Geriatric alcohol use disorder: A review for primary care physicians. *Mayo Clinic Proceedings, 90*(5), 659–666.

[745] Bommersbach, T. J., Lapid, M. I., Rummans, T. A., & Morse, R. M. (2015). Geriatric alcohol use disorder: A review for primary care physicians. *Mayo Clinic Proceedings, 90*(5), 659–666.

[746] Bommersbach, T. J., Lapid, M. I., Rummans, T. A., & Morse, R. M. (2015). Geriatric alcohol use disorder: A review for primary care physicians. *Mayo Clinic Proceedings, 90*(5), 659–666.

[747] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[748] Oslin, D. W., & Zanjani, F. (2016). Treatment of unhealthy alcohol use in older adults. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 181–199). New York, NY: Springer.

[749] Taheri, A., Dahri, K., Chan, P., Shaw, M., Aulakh, A., & Tashakkor, A. (2014). Evaluation of a symptom-triggered protocol approach to the management of alcohol withdrawal syndrome in older adults. *Journal of the American Geriatrics Society, 62*(8), 1551–1555.

[750] Bommersbach, T. J., Lapid, M. I., Rummans, T. A., & Morse, R. M. (2015). Geriatric alcohol use disorder: A review for primary care physicians. *Mayo Clinic Proceedings, 90*(5), 659–666.

[751] Bommersbach, T. J., Lapid, M. I., Rummans, T. A., & Morse, R. M. (2015). Geriatric alcohol use disorder: A review for primary care physicians. *Mayo Clinic Proceedings, 90*(5), 659–666.

[752] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

[753] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

[754] Kuerbis, A., & Sacco, P. (2013). A review of existing treatments for substance abuse among the elderly and recommendations for future directions. *Substance Abuse, 7*, 13–37.

[755] Kuerbis, A., & Sacco, P. (2013). A review of existing treatments for substance abuse among the elderly and recommendations for future directions. *Substance Abuse, 7*, 13–37.

[756] Substance Abuse and Mental Health Services Administration. (2012). *SAMHSA's working definition of recovery* (p. 3). Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from https://store.samhsa.gov/product/SAMHSA-s-Working-Definition-of-Recovery/PEP12-RECDEF

[757] Kelly, J. F., & White, W. L. (2011) Addiction recovery management: Theory, research and practice. In W. L. White & J. F. Kelly (Eds.), *Addiction recovery management: Theory, research and practice* (pp. xi, 326). Totowa, NJ: Humana Press.

[758] McKay, J. R. (2011). Continuing care and recovery. In J. F. Kelly & W. L. White (Eds.), *Addiction recovery management: Theory, research and practice* (pp. 163–183). Totowa, NJ: Humana Press.

[759] Atkinson, R. M., & Misra, S. (2002). Further strategies in the treatment of aging alcoholics. In A. M. Gurnack, R. Atkinson, & N. J. Osgood (Eds.), *Treating alcohol and drug abuse in the elderly* (pp. 131–154). New York, NY: Springer.

[760] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[761] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[762] McCrady, B. S. (2006). Family and other close relationships. In W. R. Miller & K. M. Carroll (Eds.), *Rethinking substance abuse: What the science shows, and what we should do about it* (pp. 166–181). New York, NY: Guilford Press.

[763] McCrady, B. S. (2006). Family and other close relationships. In W. R. Miller & K. M. Carroll (Eds.), *Rethinking substance abuse: What the science shows, and what we should do about it* (pp. 166–181). New York, NY: Guilford Press.

[764] National Academies of Sciences, Engineering. and Medicine. (2016). *Families caring for an aging America* (p. 366). Washington, DC: National Academies Press.

[765] National Academies of Sciences, Engineering. and Medicine. (2016). *Families caring for an aging America* (p. 366). Washington, DC: National Academies Press.

[766] National Academies of Sciences, Engineering. and Medicine. (2016). *Families caring for an aging America* (p. 366). Washington, DC: National Academies Press.

[767] National Academies of Sciences, Engineering. and Medicine. (2016). *Families caring for an aging America* (p. 366). Washington, DC: National Academies Press.

[768] Satre, D. D., Chi, F. W., Mertens, J. R., & Weisner, C. M. (2012). Effects of age and life transitions on alcohol and drug treatment outcome over nine years. *Journal of Studies on Alcohol and Drugs, 73*(3), 459–468.

[769] Satre, D. D., Chi, F. W., Mertens, J. R., & Weisner, C. M. (2012). Effects of age and life transitions on alcohol and drug treatment outcome over nine years. *Journal of Studies on Alcohol and Drugs, 73*(3), 459–468.

[770] Satre, D. D., Chi, F. W., Mertens, J. R., & Weisner, C. M. (2012). Effects of age and life transitions on alcohol and drug treatment outcome over nine years. *Journal of Studies on Alcohol and Drugs, 73*(3), 459–468.

[771] Donovan, D. M., Ingalsbe, M. H., Benbow, J., & Daley, D. C. (2013). 12-Step interventions and mutual support programs for substance use disorders: An overview. *Social Work in Public Health, 28*(3–4), 313–332.

[772] Timko, C. (2008). Outcomes of AA for special populations. In M. Galanter & L. A. Kaskutas (Eds.), *Research on Alcoholics Anonymous and spirituality in addiction recovery* (pp. 373–392). New York, NY: Springer.

[773] Kelly, J. F., Stout, R. L., Magill, M., & Tonigan, J. S. (2011). The role of Alcoholics Anonymous in mobilizing adaptive social network changes: A prospective lagged mediational analysis. *Drug and Alcohol Dependence, 114*(2–3), 119–126.

[774] Moos, R., & Timko, C. (2008). Outcome research on 12-Step and other self-help programs. In M. Galanter & H. O. Kleber (Eds.), *Textbook of substance abuse treatment* (pp. 511–521). Washington, DC: American Psychiatric Press.

[775] Moos, R., & Timko, C. (2008). Outcome research on 12-Step and other self-help programs. In M. Galanter & H. O. Kleber (Eds.), *Textbook of substance abuse treatment* (pp. 511–521). Washington, DC: American Psychiatric Press.

[776] Satre, D. D., Mertens, J. R., Areán, P. A., & Weisner, C. (2004). Five-year alcohol and drug treatment outcomes of older adults versus middle-aged and younger adults in a managed care program. *Addiction, 99*(10), 1286–1297.

[777] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

[778] Lemke, S., & Moos, R. H. (2003). Outcomes at 1 and 5 years for older patients with alcohol use disorders. *Journal of Substance Abuse Treatment, 24*(1), 43–50.

[779] Alcoholics Anonymous World Services, Inc. (2015). Reaching the older alcoholics: The "Invisible Epidemic." *Box 459, 61*(4), 6–7.

[780] Satre, D. D., Blow, F. C., Chi, F. W., & Weisner, C. (2007). Gender differences in seven-year alcohol and drug treatment outcomes among older adults. *American Journal on Addictions, 16*(3), 216–221.

[781] Timko, C. (2008). Outcomes of AA for special populations. In M. Galanter & L. A. Kaskutas (Eds.), *Research on Alcoholics Anonymous and spirituality in addiction recovery* (pp. 373–392). New York, NY: Springer.

[782] Montes, K. S., & Tonigan, J. S. (2017). Does age moderate the effect of spirituality/religiousness in accounting for Alcoholics Anonymous benefit? *Alcoholism Treatment Quarterly, 35*(2), 96–112.

[783] Satre, D. D., Mertens, J. R., Areán, P. A., & Weisner, C. (2004). Five-year alcohol and drug treatment outcomes of older adults versus middle-aged and younger adults in a managed care program. *Addiction, 99*(10), 1286–1297.

[784] SMART Recovery. (2017). *Five year strategic plan: Freedom from addiction.* Mentor, OH: SMART Recovery. Retrieved from http://smartrecovery.org/wp-content/uploads/2017/11/2017_SMART_Strategic_Plan_Final.pdf

[785] Beck, A. K., Forbes, E., Baker, A. L., Kelly, P. J., Deane, F. P., Shakeshaft, A., … Kelly, J. F. (2017). Systematic review of SMART Recovery: Outcomes, process variables, and implications for research. *Psychology of Addictive Behaviors, 31*(1), 1–20.

[786] Valentine, P., White, W., & Taylor, P. (2007). *The recovery community organization: Toward a definition and description* (p. 1). Retrieved from www.williamwhitepapers.com/pr/2007DefiningRecoveryCommunityOrganization.pdf

[787] Substance Abuse and Mental Health Services Administration. (2011). *Screening, brief intervention, and referral to treatment (SBIRT) in behavioral healthcare.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/sites/default/files/sbirtwhitepaper_0.pdf

[788] Friedmann, P. D. (2013). Alcohol use in adults. *New England Journal of Medicine, 368*(17), 1655–1656.

[789] Babor, T. F., & Higgins-Biddle, J. C. (2001). *Brief intervention for hazardous and harmful drinking: A manual for use in primary care.* Retrieved from https://apps.who.int/iris/handle/10665/67210

[790] Fishleder, S., Schonfeld, L., Corvin, J., Tyler, S., & VandeWeerd, C. (2016). Drinking behavior among older adults in a planned retirement community: Results from the Villages survey. *International Journal of Geriatric Psychiatry, 31*(5), 536–543.

[791] Sacco, P., Burruss, K., Smith, C. A., Kuerbis, A., Harrington, D., Moore, A. A., & Resnick, B. (2015). Drinking behavior among older adults at a continuing care retirement community: Affective and motivational influences. *Aging and Mental Health, 19*(3), 279–289.

[792] Linehan, M. M. (1993). *Cognitive-behavioral treatment of borderline personality disorder.* New York, NY: Guilford Press.

[793] Valentine, S. E., Bankoff, S. M., Poulin, R. M., Reidler, E. B., & Pantalone, D. W. (2015). The use of dialectical behavior therapy skills training as stand-alone treatment: A systematic review of the treatment outcome literature. *Journal of Clinical Psychology, 71*(1), 1–20.

[794] Chapman, A. L. (2006). Dialectical behavior therapy: Current indications and unique elements. *Psychiatry, 3*(9), 62–68.

[795] Drossel, C., Fisher, J. E., & Mercer, V. (2011). A DBT skills training group for family caregivers of persons with dementia. *Behavior Therapy, 42*(1), 109–119.

[796] Aalto, M., Alho, H., Halme, J. T., & Seppä, K. (2011). The Alcohol Use Disorders Identification Test (AUDIT) and its derivatives in screening for heavy drinking among the elderly. *International Journal of Geriatric Psychiatry, 26*(9), 881–885.

[797] Barbor, T. F., Higgins-Biddle, J. C., Saunders, J. B., & Monteiro, M. G. (2001). *AUDIT: The Alcohol Use Disorders Identification Test: Guidelines for use in primary care* (2nd ed., p. 17). Geneva, Switzerland: World Health Organization.

[798] Barbor, T. F., Higgins-Biddle, J. C., Saunders, J. B., & Monteiro, M. G. (2001). *AUDIT: The Alcohol Use Disorders Identification Test: Guidelines for use in primary care* (2nd ed., p. 31). Geneva, Switzerland: World Health Organization.

[799] Aalto, M., Alho, H., Halme, J. T., & Seppä, K. (2011). The Alcohol Use Disorders Identification Test (AUDIT) and its derivatives in screening for heavy drinking among the elderly. *International Journal of Geriatric Psychiatry, 26*(9), 881–885.

[800] Blow, F. C., et al. (1998). Brief screening for alcohol problems in elderly populations using the Short Michigan Alcoholism Screening Test-Geriatric Version (SMAST-G). Hilton Head Island, SC: Research Society on Alcoholism Annual Scientific Meeting.

[801] Smith, M., Robinson, L., & Segal, J. (2019). Coping with grief and loss: Understanding the grieving process and learning to heal. Retrieved from https://staging.helpguide.org/articles/grief/coping-with-grief-and-loss.htm

[802] Substance Abuse and Mental Health Services Administration. (2017). *A guide to preventing older adult alcohol and psychoactive medication misuse/abuse: Screening and brief interventions* (p. 83). Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.ncoa.org/wp-content/uploads/SBIRT-Older-Adult-Manual-Final.pdf

[803] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[804] Outlaw, F. H., Marquart, J. M., Roy, A., Luellen, J. K., Moran, M., Willis, A., & Doub, T. (2010). Treatment outcomes for older adults who abuse substances. *Journal of Applied Gerontology, 31*(1), 78–100.

[805] Kuerbis, A., & Sacco, P. (2013). A review of existing treatments for substance abuse among the elderly and recommendations for future directions. *Substance Abuse, 7,* 13–37.

[806] Mowbray, O., & Quinn, A. (2015). A scoping review of treatments for older adults with substance use problems. *Research on Social Work Practice, 26*(1), 74–87.

[807] Mowbray, O., & Quinn, A. (2015). A scoping review of treatments for older adults with substance use problems. *Research on Social Work Practice, 26*(1), 74–87.

[808] Carew, A. M., & Comiskey, C. (2018). Treatment for opioid use and outcomes in older adults: A systematic literature review. *Drug and Alcohol Dependence, 182,* 48–57.

[809] Family Caregiver Alliance. (2019). Caregiver statistics: Demographics. Retrieved from www.caregiver.org/caregiver-statistics-demographics

[810] Drugs.com. (2018). What are drug interactions? Retrieved August 27, 2018, from www.drugs.com/drug_interactions.html

[811] World Health Organization. (2018). Management of substance abuse: Psychoactive substances. Retrieved from www.who.int/substance_abuse/terminology/psychoactive_substances/en/

[812] American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

[813] American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

[814] U.S. Census Bureau. (2019, October 8). *Older people projected to outnumber children for first time in U.S. history* [Revised press release]. Retrieved April 14, 2020, from www.census.gov/newsroom/press-releases/2018/cb18-41-population-projections.html

[815] Cleary, M., Sayers, J., Bramble, M., Jackson, D., & Lopez, V. (2017). Overview of substance use and mental health among the "baby boomers" generation. *Issues in Mental Health Nursing, 38*(1), 61–65.

[816] Wu, L.-T., & Blazer, D. G. (2011). Illicit and nonmedical drug use among older adults: A review. *Journal of Aging and Health, 23*(3), 481–504.

[817] Han, B. H., Sherman, S., Mauro, P. M., Martins, S. S., Rotenberg, J., & Palamar, J. J. (2017). Demographic trends among older cannabis users in the United States, 2006–13. *Addiction (Abingdon, England), 112*(3), 516–525.

[818] National Drug Intelligence Center. (2011). *The economic impact of illicit drug use on American society.* Retrieved from www.justice.gov/archive/ndic/pubs44/44731/44731p.pdf

[819] Florence, C. S., Zhou, C., Luo, F., & Xu, L. (2016). The economic burden of prescription opioid overdose, abuse, and dependence in the United States, 2013. *Medical Care, 54*(10), 901–906.

[820] Buttorff, C., Rudder, T., & Bauman, M. (2017). *Multiple chronic conditions in the United States.* Santa Monica, CA: RAND Corporation.

[821] Rich, P. B., & Adams, S. D. (2015). Health care: Economic impact of caring for geriatric patients. *Surgical Clinics of North America, 95*(1), 11–21.

[822] Sambamoorthi, U., Tan, X., & Deb, A. (2015). Multiple chronic conditions and healthcare costs among adults. *Expert Review of Pharmacoeconomics and Outcomes Research, 15*(5), 823–832.

[823] Alpert, P. T. (2014). Alcohol abuse in older adults: An invisible population. *Home Health Care Management and Practice, 26*(4), 269–272.

[824] Benshoff, J. J., Harrawood, L. K., & Koch, D. S. (2003). Substance abuse and the elderly: Unique issues and concerns. *Journal of Rehabilitation, 69*(2), 43.

[825] Alpert, P. T. (2014). Alcohol abuse in older adults: An invisible population. *Home Health Care Management and Practice, 26*(4), 269–272.

[826] Kuerbis, A., & Sacco, P. (2013). A review of existing treatments for substance abuse among the elderly and recommendations for future directions. *Substance Abuse, 7,* 13–37.

[827] Mowbray, O., & Quinn, A. (2016). A scoping review of treatments for older adults with substance use problems. *Research on Social Work Practice, 26*(1), 74–87.

[828] Moy, I., Crome, P., Crome, I., & Fisher, M. (2011). Systematic and narrative review of treatment for older people with substance problems. *European Geriatric Medicine, 2*(4), 212–236.

[829] Bhatia, U., Nadkarni, A., Murthy, P., Rao, R., & Crome, I. (2015). Recent advances in treatment for older people with substance use problems: An updated systematic and narrative review. *European Geriatric Medicine, 6*(6), 580–586.

[830] Satre, D. D. (2015). Alcohol and drug use problems among older adults. *Clinical Psychology: Science and Practice, 22*(3), 238–254.

[831] National Center for Health Statistics. (2019). *Health, United States, 2018.* Retrieved from www.cdc.gov/nchs/data/hus/hus18.pdf

[832] Milton, J. C., Hill-Smith, I., & Jackson, S. H. (2008). Prescribing for older people. *BMJ, 336*(7644), 606–609.

[833] 2019 American Geriatrics Society Beers Criteria® Update Expert Panel. (2019). Updated AGS Beers Criteria® for potentially inappropriate medication use in older adults. *Journal of the American Geriatrics Society, 67*(4), 674–694.

[834] Milton, J. C., Hill-Smith, I., & Jackson, S. H. (2008). Prescribing for older people. *BMJ, 336*(7644), 606–609.

[835] Rochon, P. A. (2020). Drug prescribing for older adults. In J. Givens (Ed.), *UpToDate.* Retrieved from www.uptodate.com/contents/drug-prescribing-for-older-adults

[836] Aira, M., Hartikainen, S., & Sulkava, R. (2008). Drinking alcohol for medicinal purposes by people aged over 75: A community-based interview study. *Family Practice, 25*(6), 44–59.

[837] Levi-Minzi, M. A., Surratt, H. L., Kurtz, S. P., & Buttram, M. E. (2013). Under treatment of pain: A prescription for opioid misuse among the elderly? *Pain Medicine, 14*(11), 1719–1729.

[838] Christie, M. M., Bamber, D., Powell, C., Arrindell, T., & Pant, A. (2013). Older adult problem drinkers: Who presents for alcohol treatment? *Aging and Mental Health, 17*(1), 24–32.

[839] West, N. A., Severtson, S. G., Green, J. L., & Dart, R. C. (2015). Trends in abuse and misuse of prescription opioids among older adults. *Drug and Alcohol Dependence, 149*, 117–121.

[840] Institute of Medicine. (2011). *Relieving pain in America: A blueprint for transforming prevention, care, education, and research.* Washington, DC: The National Academies Press.

[841] Wick, J. Y. (2013). The history of benzodiazepines. *Consultant Pharmacist, 28*(9), 538–548.

[842] Tannenbaum, C., Paquette, A., Hilmer, S., Holroyd-Leduc, J., & Carnahan, R. (2012). A systematic review of amnestic and non-amnestic mild cognitive impairment induced by anticholinergic, antihistamine, GABAergic, and opioid drugs. *Drugs and Aging, 29*(8), 639–658.

[843] Wang, R., Chen, L., Fan, L., Gao, D., Liang, Z., He, J., … Gao, L. (2015). Incidence and effects of polypharmacy on clinical outcome among patients aged 80+: A five-year follow-up study. *PLoS One, 10*(11), e0142123.

[844] Alomar, M. J. (2014). Factors affecting the development of adverse drug reactions (Review article). *Saudi Pharmaceutical Journal, 22*(2), 83–94.

[845] Maher, R. L., Hanlon, J. T., & Hajjar, E. R. (2014). Clinical consequences of polypharmacy in elderly. *Expert Opinion on Drug Safety, 13*(1), 57–65.

[846] Park, T. W., Saitz, R., Ganoczy, D., Ilgen, M. A., & Bohnert, A. S. (2015). Benzodiazepine prescribing patterns and deaths from drug overdose among US veterans receiving opioid analgesics: Case-cohort study. *BMJ, 350.* doi:10.1136/bmj.h2698

[847] Food and Drug Administration. (2016). FDA Drug Safety Communication: *FDA warns about serious risks and death when combining opioid pain or cough medicines with benzodiazepines; Requires its strongest warning.* Retrieved from www.fda.gov/Drugs/DrugSafety/ucm518473.htm

[848] Food and Drug Administration. (2017). FDA Drug Safety Communication: *FDA urges caution about withholding opioid addiction medications from patients taking benzodiazepines or CNS depressants: Careful medication management can reduce risks.* Retrieved from www.fda.gov/drugs/drug-safety-and-availability/fda-drug-safety-communication-fda-urges-caution-about-withholding-opioid-addiction-medications

[849] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[850] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[851] Chhatre, S., Cook, R., Mallik, E., & Jayadevappa, R. (2017). Trends in substance use admissions among older adults. *BMC Health Services Research, 17*(1), 584.

[852] Black, P., & Joseph, L. J. (2014). Still dazed and confused: Midlife marijuana use by the baby boom generation. *Deviant Behavior, 35*(10), 822–841.

[853] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[854] Curran, H. V., Freeman, T. P., Mokrysz, C., Lewis, D. A., Morgan, C. J., & Parsons, L. H. (2016). Keep off the grass? Cannabis, cognition and addiction. *National Reviews: Neuroscience, 17*(5), 293–306.

[855] Lev-Ran, S., Roerecke, M., Le Foll, B., George, T. P., McKenzie, K., & Rehm, J. (2014). The association between cannabis use and depression: A systematic review and meta-analysis of longitudinal studies. *Psychological Medicine, 44*(4), 797–810.

[856] Armentano, P. (2013). Cannabis and psychomotor performance: A rational review of the evidence and implications for public policy. *Drug Testing and Analysis, 5*(1), 52–56.

[857] Mechoulam, R., & Parker, L. A. (2013). The endocannabinoid system and the brain. *Annual Review of Psychology, 64,* 21–47.

[858] ElSohly, M. A., Mehmedic, Z., Foster, S., Gon, C., Chandra, S., & Church, J. C. (2016). Changes in cannabis potency over the last 2 decades (1995-2014): Analysis of current data in the United States. *Biological Psychiatry, 79*(7), 613–619.

[859] Han, B. H., & Moore, A. A. (2018). Prevention and screening of unhealthy substance use by older adults. *Clinics in Geriatric Medicine, 34*(1), 117–129.

[860] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[861] Searby, A., Maude, P., & McGrath, I. (2015). Dual diagnosis in older adults: A review. *Issues in Mental Health Nursing, 36*(2), 104–111.

[862] Sacco, P., Unick, G. J., Zanjani, F., & Camlin, E. A. S. (2015). Hospital outcomes in major depression among older adults: Differences by alcohol comorbidity. *Journal of Dual Diagnosis, 11*(1), 83–92.

[863] Schulte, M. T., & Hser, Y.-I. (2014). Substance use and associated health conditions throughout the lifespan. *Public Health Reviews, 35*(2).

[864] Han, B. H., & Moore, A. A. (2018). Prevention and screening of unhealthy substance use by older adults. *Clinics in Geriatric Medicine, 34*(1), 117–129.

[865] Han, B. H., & Moore, A. A. (2018). Prevention and screening of unhealthy substance use by older adults. *Clinics in Geriatric Medicine, 34*(1), 117–129.

[866] Han, B. H., & Moore, A. A. (2018). Prevention and screening of unhealthy substance use by older adults. *Clinics in Geriatric Medicine, 34*(1), 117–129.

[867] Agency for Healthcare Research and Quality. (2015). *Health Literacy Universal Precautions Toolkit* (2nd ed.). Retrieved from www.ahrq.gov/professionals/quality-patient-safety/quality-resources/tools/literacy-toolkit/healthlittoolkit2.html

[868] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

[869] Weiss, B. D., Brega, A. G., LeBlanc, W. G., Mabachi, N. M., Barnard, J., Albright, K., … West, D. R. (2016). Improving the effectiveness of medication review: Guidance from the Health Literacy Universal Precautions Toolkit. *Journal of the American Board of Family Medicine, 29*(1), 18–23.

[870] Han, B. H., & Moore, A. A. (2018). Prevention and screening of unhealthy substance use by older adults. *Clinics in Geriatric Medicine, 34*(1), 117–129.

[871] American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

[872] Han, B. H., & Moore, A. A. (2018). Prevention and screening of unhealthy substance use by older adults. *Clinics in Geriatric Medicine, 34*(1), 117–129.

[873] Barry, K. L., Blow, F. C., & Oslin, D. W. (2002). Substance abuse in older adults: Review and recommendations for education and practice in medical settings. *Substance Abuse, 23*(Suppl. 3), 105–131.

[874] Kuerbis, A., Sacco, P., Blazer, D., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30,* 629–654.

[875] Office of the Surgeon General. (2016). *Facing addiction in America: The Surgeon General's report on alcohol, drugs, and health.* Washington, DC: Department of Health and Human Services.

[876] National Institute on Drug Abuse. (2018). *Principles of drug addiction treatment: A research-based guide* (3rd ed.). Bethesda, MD: National Institute on Drug Abuse. Retrieved from www.drugabuse.gov/publications/principles-drug-addiction-treatment-research-based-guide-third-edition/preface

[877] Mee-Lee, D., Shulman, G. D., Fishman, M. J., Gastfriend, D. R., & Miller, M. M. (Eds.). (2013). Application to adult special populations: Older adults. In *The ASAM criteria: Treatment criteria for addictive, substance-related, and co-occurring conditions* (3rd ed., pp. 307–317). Carson City, NV: The Change Companies.

[878] Mee-Lee, D., Shulman, G. D., Fishman, M. J., Gastfriend, D. R., & Miller, M. M. (Eds.). (2013). Level of care placement (3rd ed., pp. 174–306). In The ASAM criteria: *Treatment criteria for addictive, substance-related, and co-occurring conditions* (3rd ed., pp. 307–317). Carson City, NV: The Change Companies.

[879] Satre, D. D. & Leibowitz, A. (2015). Brief alcohol and drug interventions and motivational interviewing. In P. Areán (Ed.), *Treatment of late-life depression, anxiety, trauma and substance abuse* (pp. 163–280). Washington, DC: American Psychological Association.

[880] Substance Abuse and Mental Health Services Administration. (2017). *A guide to preventing older adult alcohol and psychoactive medication misuse/abuse: Screening and brief interventions.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.ncoa.org/wp-content/uploads/SBIRT-Older-Adult-Manual-Final.pdf

[881] Mercadante, S. (2015). Opioid metabolism and clinical aspects. *European Journal of Pharmacology, 769,* 71–78.

[882] Martin, C. M., & Forrester, C. S. (2013). Anticipating and managing opioid side effects in the elderly. *Consultant Pharmacist, 28*(3), 150–159.

[883] Dowell, D., Haegerich, T. M., & Chou, R. (2016). CDC guideline for prescribing opioids for chronic pain: United States, 2016. *MMWR Recommendations and Reports, 65*(No. RR-1), 1–49.

[884] Substance Abuse and Mental Health Services Administration. (2018). *SAMHSA opioid overdose prevention toolkit.* HHS Publication No. (SMA) 18-4742. Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from https://store.samhsa.gov/product/Opioid-Overdose-Prevention-Toolkit/SMA18-4742

[885] Bommersbach, T. J., Lapid, M. A., Rumman, T. A., & Morse, R. M. (2015). Geriatric alcohol use disorder: A review for primary care physicians. *Mayo Clinic Proceedings, 90*(5), 659–666.

[886] Substance Abuse and Mental Health Services Administration. (2020). *Medications for opioid use disorder.* Treatment Improvement Protocol (TIP) Series 63. Publication No. PEP20-02-01-006. Rockville, MD: Substance Abuse and Mental Health Services Administration.

[887] Kahan, M., Srivastava, A., Ordean, A., & Cirone, S. (2011). Buprenorphine: New treatment of opioid addiction in primary care. *Canadian Family Physician, 57*(3), 281–289.

[888] Whelan, P. J., & Remski, K. (2012). Buprenorphine vs. methadone treatment: A review of evidence in both developed and developing worlds. *Journal of Neurosciences in Rural Practice, 3*(1), 45–50.

[889] Karp, J. F., Butters, M. A., Begley, A. E., Miller, M. D., Lenze, E. J., Blumberger, D. M., … Reynolds, C. F., III. (2014). Safety, tolerability, and clinical effect of low-dose buprenorphine for treatment-resistant depression in midlife and older adults. *Journal of Clinical Psychiatry, 75*(8), e785–e793.

[890] Le Roux, C., Tang, Y., & Drexler, K. (2016). Alcohol and opioid use disorder in older adults: Neglected and treatable illnesses. *Current Psychiatry Reports, 18*(9), 87.

[891] Dugosh, K., Abraham, A., Seymour, B., McLoyd, K., Chalk, M., & Festinger, D. (2016). A systematic review on the use of psychosocial interventions in conjunction with medications for the treatment of opioid addiction. *Journal of Addiction Medicine, 10*(2), 93–103.

[892] Makris, U. E., Abrams, R. C., Gurland, B., & Reid, M. C. (2014). Management of persistent pain in the older patient: A clinical review. *JAMA, 312*(8), 825–836.

[893] Makris, U. E., Abrams, R. C., Gurland, B., & Reid, M. C. (2014). Management of persistent pain in the older patient: A clinical review. *JAMA, 312*(8), 825–836.

[894] Keilman, L. (2015). *Compendium of evidence-based nonpharmacologic interventions for pain in older adults.* East Lansing, MI: Michigan State University, College of Nursing.

[895] Bicket, M. C., & Mao, J. (2015). Chronic pain in older adults. *Anesthesiology Clinics, 33*(3), 577–590.

[896] Makris, U. E., Abrams, R. C., Gurland, B., & Reid, M. C. (2014). Management of persistent pain in the older patient: A clinical review. *JAMA, 312*(8), 825–836.

[897] Schroeck, J. L., Ford, J., Conway, E. L., Kurtzhalts, K. E., Gee, M. E., Vollmer, K. A., & Mergenhagen, K. A. (2016). Review of safety and efficacy of sleep medicines in older adults. *Clinical Therapeutics, 38*(11), 2340–2372.

[898] Hood, S. D., Norman, A., Hince, D. A., Melichar, J. K., & Hulse, G. K. (2014). Benzodiazepine dependence and its treatment. *British Journal of Clinical Pharmacology, 77,* 285–294.

[899] Gould, R. L., Coulson, M. C., Patel, N., Highton-Williamson, E., & Howard, R. J. (2014). Interventions for reducing benzodiazepine use in older people: Meta-analysis of randomised controlled trials. *British Journal of Psychiatry, 204*(2), 98–107.

[900] Markota, M., Rummans, T., Bostwick, M., & Lapid, M. (2016). Benzodiazepine use in older adults: Dangers, management, and alternative therapies. *Mayo Clinic Proceedings, 91*(11), 1632–1639.

[901] Tannenbaum, C., Martin, P., Tamblyn, R., Benedetti, A., & Ahmed, S. (2014). Reduction of inappropriate benzodiazepine prescriptions among older adults through direct patient education: The EMPOWER cluster randomized trial. *JAMA Internal Medicine, 174*(6), 890–898.

[902] Paquin, A. M., Zimmerman, K., & Rudolph, J. L. (2014). Risk versus risk: A review of benzodiazepine reduction in older adults. *Expert Opinion on Drug Safety, 13*(7), 919–934.

[903] Tannenbaum, C. (2015). Inappropriate benzodiazepine use in elderly patients and its reduction. *Journal of Psychiatry and Neuroscience, 40*(3), E27–E28.

[904] Lovato, N., Lack, L., Wright, H., & Kennaway, D. J. (2014). Evaluation of a brief treatment program of cognitive behavior therapy for insomnia in older adults. *Sleep, 37*(1), 117–126.

[905] Rybarczyk, B., Lund, H. G., Garroway, A. M., & Mack, L. (2013). Cognitive behavioral therapy for insomnia in older adults: Background, evidence, and overview of treatment protocol. *Clinical Gerontologist, 36*(1), 70–93.

[906] McMurry, S. M., Logsdon, R. G., Teri, L., & Vitiello, M. V. (2007). Evidence-based psychological treatments for insomnia in older adults. *Psychology and Aging, 22*(1), 18–27.

[907] Belanger, L., LeBlanc, M., & Morin, C. M. (2012). Cognitive behavioral therapy for insomnia in older adults. *Cognitive and Behavioral Practice, 19*(1), 101–115.

[908] American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

[909] Bonnet, U., & Preuss, U. W. (2017). The cannabis withdrawal syndrome: Current insights. *Substance Abuse and Rehabilitation, 8,* 9–37.

[910] National Institute on Drug Abuse. (2019). Marijuana Research Report. www.drugabuse.gov/publications/research-reports/marijuana

[911] Stern, T. A., Celano, C. M., Gross, A. F., Huffman, J. C., Freudenreich, O., Kontos, N., … Thompson, B. T. (2010). The assessment and management of agitation and delirium in the general hospital. *Primary Care Companion to the Journal of Clinical Psychiatry, 12*(1), PCC.09r00938.

[912] Kim, J. H., & Lawrence, A. J. (2014). Drugs currently in Phase II clinical trials for cocaine addiction. *Expert Opinion on Investigational Drugs, 23*(8), 1105–1122.

[913] Haile, C. N., & Kosten, T. R. (2013). Pharmacotherapy for stimulant-related disorders. *Current Psychiatry Reports, 15*(11), 10.1007/s11920–013–0415–y.

[914] Lee, N. K., & Rawson, R. A. (2008). A systematic review of cognitive and behavioural therapies for methamphetamine dependence. *Drug and Alcohol Review, 27*(3), 309–317.

[915] Jhanjee, S. (2014). Evidence-based psychosocial interventions in substance use. *Indian Journal of Psychological Medicine, 36*(2), 112–118.

[916] Jhanjee, S. (2014). Evidence-based psychosocial interventions in substance use. *Indian Journal of Psychological Medicine, 36*(2), 112–118.

[917] Bhatia, U., Nadkarni, A., Murthy, P., Rao, R., & Crome, I. (2015). Recent advances in treatment for older people with substance use problems: An updated systematic and narrative review. *European Geriatric Medicine, 6,* 580–586.

[918] Kiosses, D. N., & Alexopoulos, G. S. (2014). Problem-solving therapy in the elderly. *Current Treatment Options in Psychiatry, 1*(1), 15–26.

[919] Zbikowski, S. M., Magnusson, B., Pockey, J. R., Tindle, H. A., & Weaver, K. E. (2012). A review of smoking cessation interventions for smokers aged 50 and over. *Maturitas, 71,* 131–141.

[920] Kropf, N. P., & Cummings, S. M. (2017). *Evidence-based treatment with older adults: Theory, Practice, and Research.* New York, NY: Oxford University Press.

[921] Moy, I., Crome, P., Crome, I., & Fisher, M. (2011). Systematic and narrative review of treatment for older people with substance problems. *European Geriatric Medicine, 2*(4), 212–236.

[922] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

[923] Kuerbis, A., & Sacco, P. (2013). A review of existing treatments for substance abuse among the elderly and recommendations for future directions. *Substance Abuse, 7,* 13–37.

[924] Oslin, D. W., Slaymaker, V. J., Blow, F. C., Owen, P. L., & Colleran, C. (2005). Treatment outcomes for alcohol dependence among middle-aged and older adults. *Addictive Behaviors, 30*(7), 1431–1436.

[925] Kuerbis, A., & Sacco, P. (2013). A review of existing treatments for substance abuse among the elderly and recommendations for future directions. *Substance Abuse, 7,* 13–37.

[926] Substance Abuse and Mental Health Services Administration. (2019). *Get connected: Linking older adults with resources on medication, alcohol, and mental health.* HHS Publication No. (SMA) 03-3824. Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from https://store.samhsa.gov/product/Get-Connected-Linking-Older-Adults-with-Resources-on-Medication-Alcohol-and-Mental-Health-2019-Edition/SMA03-3824

[927] Kelly, J. F., & White, W. L. (2011). Addiction recovery management: Theory, research and practice. In J. F. White & W. L. White (Eds.), *Current clinical psychiatry* (pp. xi, 326). Totowa, NJ: Humana Press.

[928] Kelly, J. F., & White, W. L. (2011). Addiction recovery management: Theory, research and practice. In J. F. White & W. L. White (Eds.). *Current clinical psychiatry* (pp. xi, 326). Totowa, NJ: Humana Press.

[929] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[930] Oslin, D. W., Grantham, S., Coakley, E., Maxwell, J., Miles, K., Ware, J., … Levkoff, S. (2006). PRISM-E: Comparison of integrated care and enhanced specialty referral in managing at-risk alcohol use. *Psychiatric Services, 57*(7), 954–958.

[931] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[932] McCrady, B. S. (2006). Family and other close relationships. In W. R. Miller & K. M. Carroll (Eds.), *Rethinking substance abuse: What the science shows, and what we should do about it* (pp. 166–181). New York, NY: Guilford Press.

[933] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[934] Donovan, D. M., Ingalsbe, M. H., Benbow, J., & Daley, D. C. (2013). 12-Step Interventions and mutual support programs for substance use disorders: An overview. *Social Work in Public Health, 28*(3–4), 313–332.

[935] Donovan, D. M., Ingalsbe, M. H., Benbow, J., & Daley, D. C. (2013). 12-Step interventions and mutual support programs for substance use disorders: An overview. *Social Work in Public Health, 28*(3–4), 313–332.

[936] Beck, A. K., Forbes, E., Baker, A. L., Kelly, P. J., Deane, F. P., Shakeshaft, A., … Kelly, J. F. (2017). Systematic review of SMART Recovery: Outcomes, process variables, and implications for research. *Psychology of Addictive Behaviors, 31*(1), 1–20.

[937] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[938] Kelly, J. F., Greene, M. C., & Bergman, B. G. (2014). Do drug-dependent patients attending Alcoholics Anonymous rather than Narcotics Anonymous do as well? A prospective, lagged, matching analysis. *Alcohol and Alcoholism, 49*(6), 645–653.

[939] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[940] Kelly, J. F., Stout, R. L., Magill, M., & Tonigan, J. S. (2011). The role of Alcoholics Anonymous in mobilizing adaptive social network changes: A prospective lagged mediational analysis. *Drug and Alcohol Dependence, 114*(2–3), 119–126.

[941] Wolitzky-Taylor, K. B., Castriotta, N., Lenze, E. J., Stanley, M. A., & Craske, M. G. (2010). Anxiety disorders in older adults: A comprehensive review. *Depression and Anxiety, 27*(2), 190–211.

[942] Wolitzky-Taylor, K. B., Castriotta, N., Lenze, E. J., Stanley, M. A., & Craske, M. G. (2010). Anxiety disorders in older adults: A comprehensive review. *Depression and Anxiety, 27*(2), 190–211.

[943] Chernick, R., & Kuerbis, A. (2016). Social and familial contexts for drinking among older adults. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 149–166). New York, NY: Springer.

[944] Bogenschutz, M. P., Donovan, D. M., Mandler, R. N., Perl, H. I., Forcehimes, A. A., Crandall, C., … Douaihy, A. (2014). Brief intervention for drug users presenting in emergency departments (NIDA CTN Protocol 0047: SMART-ED). *JAMA Internal Medicine, 174*(11), 1736–1745.

[945] Lofwall, M. R., Schuster, A., & Strain, E. C. (2008). Changing profile of abused substances by older persons entering treatment. *Journal of Nervous and Mental Disease, 196*(12), 898–905.

[946] Yarnell, S. C. (2015). Cocaine abuse in later life: A case series and review of the literature. *Primary Care Companion for CNS Disorders, 17*(2), 10.4088/PCC.14r01727.

947 Yarnell, S. C. (2015). Cocaine abuse in later life: A case series and review of the literature. *Primary Care Companion for CNS Disorders, 17*(2), 10.4088/PCC.14r01727.

948 Mee-Lee, D., Shulman, G. D., Fishman, M. J., Gastfriend, D. R., & Miller, M. M. (Eds.). (2013). Application to adult special populations: Older adults. In The ASAM criteria: *Treatment criteria for addictive, substance-related, and co-occurring conditions* (3rd ed., pp. 307–317). Carson City, NV: The Change Companies.

949 Barry, K. L., & Blow, F. C. (2016). Drinking over the lifespan: Focus on older adults. *Alcohol Research: Current Reviews, 38*(1), 115–120.

950 Rooney, R. F. (2014). Preventing dementia: How lifestyle in midlife affects risk. *Current Opinion in Psychiatry, 27*(2), 149–157.

951 Baumgart, M., Snyder, H. M., Carrillo, M. C., Fazio, S., Kim, H., & Johns, H. (2015). Summary of the evidence on modifiable risk factors for cognitive decline and dementia: A population-based perspective. *Alzheimer's and Dementia, 11*(6), 718–726.

952 National Institute on Alcohol Abuse and Alcoholism. (n.d.). Drinking levels defined. Retrieved from www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

953 U.S. Department of Health and Human Services & U.S. Department of Agriculture. (2015). *2015–2020 Dietary Guidelines for Americans* (8th ed.). Retrieved from https://health.gov/our-work/food-nutrition/2015-2020-dietary-guidelines

954 American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

955 National Institute on Alcohol Abuse and Alcoholism. (n.d.). Drinking levels defined. Retrieved from www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

956 Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

957 Kaiser Permanente. (2019). Alcohol use in older adults. Retrieved from https://wa.kaiserpermanente.org/healthAndWellness/index.jhtml?item=%2Fcommon%2FhealthAndWellness%2FhealthyLiving%2Flifestyle%2Falcohol-seniors.html

958 Family Caregiver Alliance. (2019). Caregiver statistics: Demographic. Retrieved from www.caregiver.org/caregiver-statistics-demographics

959 Drugs.com. (2018). What are drug interactions? Retrieved August 27, 2018, from www.drugs.com/drug_interactions.html

960 World Health Organization. (2018). Lexicon of alcohol and drug terms published by the World Health Organization. Retrieved from www.who.int/substance_abuse/terminology/who_lexicon/en/

961 Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

962 U.S. Department of Health and Human Services & U.S. Department of Agriculture. (2015). *2015–2020 Dietary Guidelines for Americans* (8th ed.). Retrieved from https://health.gov/our-work/food-nutrition/2015-2020-dietary-guidelines

963 National Institute on Alcohol Abuse and Alcoholism. (n.d.). Drinking levels defined. Retrieved from www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

964 Centers for Disease Control and Prevention. (2018). Alcohol and Public Health. Frequently Asked Questions. Retrieved from www.cdc.gov/alcohol/faqs.htm

965 U.S. Department of Health and Human Services & U.S. Department of Agriculture. (2015). *2015–2020 Dietary Guidelines for Americans* (8th ed.). Retrieved from https://health.gov/our-work/food-nutrition/2015-2020-dietary-guidelines

966 World Health Organization. (2018). Management of substance abuse: Psychoactive substances. Retrieved August 27, 2018, from www.who.int/substance_abuse/terminology/psychoactive_substances/en/

967 American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

968 American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

969 Chhatre, S., Cook, R., Mallik, E., & Jayadevappa, R. (2017). Trends in substance use admissions among older adults. *BMC Health Services Research, 17*(1), 584.

970 Alpert, P. (2014). Alcohol abuse in older adults: An invisible population. *Home Health Care Management and Practice, 26*(4), 269–272.

971 American Psychiatric Association. (2015). Position statement on substance use disorders in older adults. www.psychiatry.org/File%20Library/About-APA/Organization-Documents-Policies/Policies/Position-Substance-Use-Disorders-in-Older-Adults.pdf

[972] Barry, K. L., & Blow, F. C. (2016). Drinking over the lifespan: Focus on older adults. *Alcohol Research: Current Reviews, 38*(1), 115–120.

[973] Qato, D. M., Manzoor, B. S., & Lee, T. A. (2015). Drug-alcohol interactions in older U.S. adults. *Journal of the American Geriatrics Society, 63*(11), 2324–2331.

[974] Mattson, M., Lipari, R. N., Hays, C., & Van Horn, S. L. (2017). A day in the life of older adults: Substance use facts. *The CBHSQ Report.* Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. Retrieved March 10, 2018, from www.samhsa.gov/data/sites/default/files/report_2792/ShortReport-2792.html

[975] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[976] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[977] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[978] National Institute on Alcohol Abuse and Alcoholism. (2016). *Rethinking drinking.* Bethesda, MD: National Institute on Alcohol Abuse and Alcoholism. Bethesda. MD: National Institute on Alcohol Abuse and Alcoholism.

[979] Breslow, R. A., Castle, I. P., Chen, C. M., & Graubard, B. I. (2017). Trends in alcohol consumption among older Americans: National Health Interview Surveys, 1997 to 2014. *Alcoholism, Clinical and Experimental Research, 41*(5), 976–986.

[980] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[981] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[982] National Institute on Drug Abuse. (2018). Misuse of prescription drugs. Retrieved from www.drugabuse.gov/publications/research-reports/misuse-prescription-drugs

[983] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[984] Blazer, D. G., & Wu, L. T. (2012). Patterns of tobacco use and tobacco-related psychiatric morbidity and substance use among middle-aged and older adults in the United States. *Aging and Mental Health, 16*(3), 296–304.

[985] American Geriatrics Society. (2019). Updated AGS Beers Criteria® for potentially inappropriate medication use in older adults. *Journal of the American Geriatrics Society, 67*(4), 674–694.

[986] Markota, M., Rummans, T. A., Bostwick, J. M., & Lapid, M. I. (2016). Benzodiazepine use in older adults: Dangers, management, and alternative therapies. *Mayo Clinic Proceedings, 91*(11), 1632–1639.

[987] Choi, N. G., DiNitto, D. M., & Marti, C. N. (2016). Older marijuana users: Life stressors and perceived social support. *Drug and Alcohol Dependence, 169,* 56–63.

[988] Bolla, K. I., Brown, K., Eldreth, D., Tate, K., & Cadet, J. L. (2002). Dose-related neurocognitive effects of marijuana use. *Neurology, 59*(9), 1337–1343.

[989] Barry, K. L., & Blow, F. C. (2016). Drinking over the lifespan: Focus on older adults. *Alcohol Research: Current Reviews, 38*(1), 115–120.

[990] Moore, A. A., Whiteman, E. J., & Ward, K. T. (2007). Risks of combined alcohol/medication use in older adults. *American Journal of Geriatric Pharmacotherapy, 5*(1), 64–74.

[991] Holton, A. E., Gallagher, P., Fahey, T., & Cousins, G. (2017). Concurrent use of alcohol interactive medications and alcohol in older adults: A systematic review of prevalence and associated adverse outcomes. *BMC Geriatrics, 17*(1), 148.

[992] Zanjani, F., Smith, R., Slavova, S., Charnigo, R., Schoenberg, N., … Clayton, R. (2016). Concurrent alcohol and medication poisoning hospital admissions among older rural and urban residents. *American Journal of Drug and Alcohol Abuse, 42*(4), 422–430.

[993] Clausen, T., Martinez, P., Towers, A., Greenfield, T., & Kowal, P. (2016). Alcohol consumption at any level increases risk of injury caused by others: Data from the Study on Global AGEing and Adult Health. *Substance Abuse, 9*(Suppl. 2), 125–132.

[994] Thompson, H. J., Dikmen, S., & Temkin, N. (2012). Prevalence of comorbidity and its association with traumatic brain injury and outcomes in older adults. *Research in Gerontological Nursing, 5*(1), 17–24.

[995] Grossbard, J., Malte, C. A., Lapham, G., Pagulayan, K., Turner, A. P., Rubinsky, A. D., … Hawkins, E. J. (2017). Prevalence of alcohol misuse and follow-up care in a national sample of OEF/OIF VA patients with and without TBI. *Psychiatric Services, 68*(1), 48–55.

[996] Choi, N. G., DiNitto, D. M., Marti, C. N., & Choi, B. Y. (2016). Nonsuicidal self-injury and suicide attempts among ED patients older than 50 years: Comparison of risk factors and ED visit outcomes. *American Journal of Emergency Medicine, 34*(6), 1016–1021.

[997] Blow, F. C., & Barry, K. L. (2012). Alcohol and substance misuse in older adults. *Current Psychiatry Reports, 14*(4), 310–319.

[998] Mayo Clinic. (2019). Alcohol: Does it affect blood pressure? Retrieved June 17, 2019, from www.mayoclinic.org/diseases-conditions/high-blood-pressure/expert-answers/blood-pressure/faq-20058254

[999] Bommersbach, T. J., Lapid, M. I., Rummans, T. A., & Morse, R. M. (2015). Geriatric alcohol use disorder: A review for primary care physicians. *Mayo Clinic Proceedings, 90*(5), 659–666.

[1000] Barry, K. L., & Blow, F. C. (2016). Drinking over the lifespan: Focus on older adults. *Alcohol Research: Current Reviews, 38*(1), 115–120.

[1001] Harada, C. N., Natelson Love, M. C., & Triebel, K. L. (2013). Normal cognitive aging. *Clinics in Geriatric Medicine, 29*(4), 737–752.

[1002] National Institute on Aging. (2017). How the aging brain affects thinking. Retrieved June 17, 2019, from www.nia.nih.gov/health/how-aging-brain-affects-thinking

[1003] Harada, C. N., Natelson Love, M. C., & Triebel, K. L. (2013). Normal cognitive aging. *Clinics in Geriatric Medicine, 29*(4), 737–752.

[1004] Sudhinaraset, M., Wigglesworth, C., & Takeuchi, D. T. (2016). Social and cultural contexts of alcohol use: Influences in a social-ecological framework. *Alcohol Research, 38*(1), 35–45.

[1005] GBD 2016 Alcohol Collaborators. (2018). Alcohol use and burden for 195 countries and territories, 1990–2016: A systematic analysis for the Global Burden of Disease Study 2016. *Lancet, 392*(10152), 1015–1035.

[1006] Piazza-Gardner, A. K., Gaffud, T. J., & Barry, A. E. (2013). The impact of alcohol on Alzheimer's disease: A systematic review. *Aging and Mental Health, 17*(2), 133–146.

[1007] Downer, B., Zanjani, F., & Fardo, D. W. (2014). The relationship between midlife and late life alcohol consumption, APOE e4 and the decline in learning and memory among older adults. *Alcohol and Alcoholism, 49*(1), 17–22.

[1008] Kuźma, E., Llewellyn, D. J., Langa, K. M., Wallace, R. B., & Lang, I. A. (2014). History of alcohol use disorders and risk of severe cognitive impairment: A 19-year prospective cohort study. *American Journal of Geriatric Psychiatry, 22*(10), 1047–1054.

[1009] González-Reimers, E., Santolaria-Fernández, F., Martín-González, M. C., Fernández-Rodríguez, C. M., & Quintero-Platt, G. (2014). Alcoholism: A systemic proinflammatory condition. *World Journal of Gastroenterology, 20*(40), 14660–14671.

[1010] Bjork, J. M., & Gilman, J. M. (2014). The effects of acute alcohol administration on the human brain: Insights from neuroimaging. *Neuropharmacology, 84,* 101–110.

[1011] Barry, K. L., & Blow, F. C. (2016). Drinking over the lifespan: Focus on older adults. *Alcohol Research: Current Reviews, 38*(1), 115–120.

[1012] Qato, D. M., Manzoor, B. S., & Lee, T. A. (2015). Drug-alcohol interactions in older U.S. adults. *Journal of the American Geriatrics Society, 63*(11), 2324–2331.

[1013] Stavro, K., Pelletier, J., & Potvin, S. (2013). Widespread and sustained cognitive deficits in alcoholism: A meta-analysis. *Addiction Biology, 18*(2), 203–213.

[1014] Bates, M. E., Buckman, J. F., & Nguyen, T. T. (2013). A role for cognitive rehabilitation in increasing the effectiveness of treatment for alcohol use disorders. *Neuropsychology Review, 23*(1), 27–47.

[1015] de la Monte, S. M., & Kril, J. J. (2014). Human alcohol-related neuropathology. *Acta Neuropathology, 127*(1), 71–90.

[1016] Kim, J. W., Lee, D. Y., Lee, B. C., Jung, M. H., Kim, H., Choi, Y. S., & Choi, I. G. (2012). Alcohol and cognition in the elderly: A review. *Psychiatry Investigation, 9*(1), 8–16.

[1017] Topiwala, A., Allan, C. L., Valkanova, V., Zsoldos, E., Filippini, N., Sexton, C., … Ebmeier, K. P. (2017). Moderate alcohol consumption as risk factor for adverse brain outcomes and cognitive decline: Longitudinal cohort study. *BMJ, 357,* j2353.

[1018] Huang, W.-J., Zhang, X., & Chen, W.-W. (2016). Association between alcohol and Alzheimer's disease. *Experimental and Therapeutic Medicine, 12*(3), 1247–1250.

[1019] Piazza-Gardner, A. K., Gaffud, T. J., & Barry, A. E. (2013). The impact of alcohol on Alzheimer's disease: A systematic review. *Aging and Mental Health, 17*(2), 133–146.

[1020] Downer, B., Zanjani, F., & Fardo, D. W. (2014). The relationship between midlife and late life alcohol consumption, APOE e4 and the decline in learning and memory among older adults. *Alcohol and Alcoholism, 49*(1), 17–22.

[1021] Kuźma, E., Llewellyn, D. J., Langa, K. M., Wallace, R. B., & Lang, I. A. (2014). History of alcohol use disorders and risk of severe cognitive impairment: A 19-year prospective cohort study. *American Journal of Geriatric Psychiatry, 22*(10), 1047–1054.

[1022] Xue, H., Sun, Q., Liu, L., Zhou, L., Liang, R., He, R., & Yu, H. (2017). Risk factors of transition from mild cognitive impairment to Alzheimer's disease and death: A cohort study. *Comprehensive Psychiatry, 78,* 91–97.

[1023] Nordstrom, P., Nordstrom, A., Eriksson, M., Wahlund, L. O., & Gustafson, Y. (2013). Risk factors in late adolescence for young-onset dementia in men: A nationwide cohort study. *JAMA Internal Medicine, 173*(17), 1612–1618.

[1024] Anttila, T., Helkala, E. L., Viitanen, M., Kareholt, I., Fratiglioni, L., Winblad, B., … Kivipelto, M. (2004). Alcohol drinking in middle age and subsequent risk of mild cognitive impairment and dementia in old age: A prospective population-based study. *BMJ, 329*(7465), 539.

[1025] de Oliveira, F. F., Wajman, J. R., Bertolucci, P. H., Chen, E. S., & Smith, M. C. (2015). Correlations among cognitive and behavioural assessments in patients with dementia due to Alzheimer's disease. *Clinical Neurology and Neurosurgery, 135,* 27–33.

[1026] González-Reimers, E., Santolaria-Fernández, F., Martín-González, M. C., Fernández-Rodríguez, C. M., & Quintero-Platt, G. (2014). Alcoholism: A systemic proinflammatory condition. *World Journal of Gastroenterology, 20*(40), 14660–14671.

[1027] Bjork, J. M., & Gilman, J. M. (2014). The effects of acute alcohol administration on the human brain: Insights from neuroimaging. *Neuropharmacology, 84,* 101–110.

[1028] Barry, K. L., & Blow, F. C. (2016). Drinking over the lifespan: Focus on older adults. *Alcohol Research: Current Reviews, 38*(1), 115–120.

[1029] Qato, D. M., Manzoor, B. S., & Lee, T. A. (2015). Drug-alcohol interactions in older U.S. adults. *Journal of the American Geriatrics Society, 63*(11), 2324–2331.

[1030] Panza, F., Capurso, C., D'Introno, A., Colacicco, A. M., Frisardi, V., Lorusso, M., … Solfrizzi, V. (2009). Alcohol drinking, cognitive functions in older age, predementia, and dementia syndromes. *Journal of Alzheimer's Disease, 17*(1), 7–31.

[1031] GBD 2016 Alcohol Collaborators. (2018). Alcohol use and burden for 195 countries and territories, 1990–2016: A systematic analysis for the Global Burden of Disease Study 2016. *Lancet, 392*(10152), 1015–1035.

[1032] Hein, C., Forgues, A., Piau, A., Sommet, A., Vellas, B., & Nourhashemi, F. (2014). Impact of polypharmacy on occurrence of delirium in elderly emergency patients. *Journal of the American Medical Directors Association, 15*(11), e811–e855.

[1033] Inouye, S. K., Robinson, T., Blaum, C., Busby-Whitehead, J., Boustani, M., Chalian, A., … Richter, H. (2015). Postoperative delirium in older adults: Best practice statement from the American Geriatrics Society. *Journal of the American College of Surgeons, 220*(2), 136–148.

[1034] Inouye, S. K., Westendorp, R. G., & Saczynski, J. S. (2014). Delirium in elderly people. *Lancet, 383*(9920), 911–922.

[1035] Costin, B. N., & Miles, M. F. (2014). Molecular and neurologic responses to chronic alcohol use. *Handbook of Clinical Neurology, 125,* 157–171.

[1036] Mainerova, B., Prasko, J., Latalova, K., Axmann, K., Cerna, M., … Bradacova, R. (2015). Alcohol withdrawal delirium: Diagnosis, course and treatment. *Biomedical Papers of the Medical Faculty of the University Palacky, Olomouc, Czechoslovakia, 159*(1), 44–52.

[1037] Schuckit, M. A. (2014). Recognition and management of withdrawal delirium (delirium tremens). *New England Journal of Medicine, 371*(22), 2109–2113.

[1038] Schuckit, M. A. (2014). Recognition and management of withdrawal delirium (delirium tremens). *New England Journal of Medicine, 371*(22), 2109–2113.

[1039] Sachdeva, A., Chandra, M., Choudhary, M., Dayal, P., & Anand, K. S. (2016). Alcohol-related dementia and neurocognitive impairment: A review study. *International Journal of High-Risk Behaviors and Addiction, 5*(3), e27976.

[1040] Cheng, C., Huang, C. L., Tsai, C. J., Chou, P. H., Lin, C. C., & Chang, C. K. (2017). Alcohol-related dementia: A systemic review of epidemiological studies. *Psychosomatics, 58*(4), 331–342.

[1041] Sachdeva, A., Chandra, M., Choudhary, M., Dayal, P., & Anand, K. S. (2016). Alcohol-related dementia and neurocognitive impairment: A review study. *International Journal of High Risk Behaviors and Addiction, 5*(3), e27976.

[1042] Sachdeva, A., Chandra, M., Choudhary, M., Dayal, P., & Anand, K. S. (2016). Alcohol-related dementia and neurocognitive impairment: A review study. *International Journal of High Risk Behaviors and Addiction, 5*(3), e27976.

[1043] Zahr, N. M., Kaufman, K. L., & Harper, C. G. (2011). Clinical and pathological features of alcohol-related brain damage. *Nature Reviews: Neurology, 7,* 284–294.

[1044] Galvin, R., Bråthen, G., Ivashynka, A., Hillbom, M., Tanasescu, R., & Leone, M. A. (2010). EFNS guidelines for diagnosis, therapy and prevention of Wernicke encephalopathy. *European Journal of Neurology, 17*(12), 1408–1418.

[1045] Galvin, R., Bråthen, G., Ivashynka, A., Hillbom, M., Tanasescu, R., & Leone, M. A. (2010). EFNS guidelines for diagnosis, therapy and prevention of Wernicke encephalopathy. *European Journal of Neurology, 17*(12), 1408–1418.

[1046] Gerridzen, I. J., Moerman-van den Brink, W. G., Depla, M. F., Verschuur, E. M., Veenhuizen, R. B., van der Wouden, J. C., … Joling, K. J. (2017). Prevalence and severity of behavioural symptoms in patients with Korsakoff syndrome and other alcohol-related cognitive disorders: A systematic review. *International Journal of Geriatric Psychiatry, 32*(3), 256–273.

[1047] Zhong, G., Wang, Y., Zhang, Y., & Zhao Y. (2015). Association between benzodiazepine use and dementia: A meta-analysis. *PLoS One, 10*(5), e0127836.

[1048] Billioti de Gage, S., Pariente, A., & Bégaud, B. (2015). Is there really a link between benzodiazepine use and the risk of dementia? *Expert Opinions in Drug Safety, 14*(5), 733–747.

[1049] Zhong, G., Wang, Y., Zhang, Y., & Zhao Y. (2015). Association between benzodiazepine use and dementia: A meta-analysis. *PLoS One, 10*(5), e0127836.

[1050] 2019 American Geriatrics Society Beers Criteria® Update Expert Panel. (2019). Updated AGS Beers Criteria® for potentially inappropriate medication use in older adults. *Journal of the American Geriatrics Society,* 67(4), 674–694.

[1051] 2019 American Geriatrics Society Beers Criteria® Update Expert Panel. (2019). Updated AGS Beers Criteria® for potentially inappropriate medication use in older adults. *Journal of the American Geriatrics Society,* 67(4), 674–694.

[1052] Zhong, G., Wang, Y., Zhang, Y., Guo, J. J., & Zhao, Y. (2015). Smoking is associated with an increased risk of dementia: A meta-analysis of prospective cohort studies with investigation of potential effect modifiers. *PLoS One, 10*(3), e0118333.

[1053] Peters, R., Poulter, R., Warner, J., Beckett, N., Burch, L., & Bulpitt, C. (2008). Smoking, dementia and cognitive decline in the elderly: A systematic review. *BMC Geriatrics, 8,* 36.

[1054] Cataldo, J. K., Prochaska, J. J., & Glantz, S. A. (2010). Cigarette smoking is a risk factor for Alzheimer's disease: An analysis controlling for tobacco industry affiliation. *Journal of Alzheimer's Disease, 19*(2), 465–480.

[1055] Anstey, K. J., von Sanden, C., Salim, A., & O'Kearney, R. (2007). Smoking as a risk factor for dementia and cognitive decline: A meta-analysis of prospective studies. *American Journal of Epidemiology, 166*(4), 367–378.

[1056] Beydoun, M. A., Beydoun, H. A., Gamaldo, A. A., Teel, A., Zonderman, A. B., & Wang, Y. (2014). Epidemiologic studies of modifiable factors associated with cognition and dementia: Systematic review and meta-analysis. *BMC Public Health, 14,* 643.

[1057] Wu, L. T., & Blazer, D. G. (2014). Substance use disorders and psychiatric comorbidity in mid and later life: A review. *International Journal of Epidemiology, 43*(2), 304–317.

[1058] Wu, L. T., & Blazer, D. G. (2014). Substance use disorders and psychiatric comorbidity in mid and later life: A review. *International Journal of Epidemiology, 43*(2), 304–317.

[1059] Mowbray, O., Washington, T., Purser, G., & O'Shields, J. (2017). Problem drinking and depression in older adults with multiple chronic health conditions. *Journal of the American Geriatrics Society, 65*(1), 146–152.

[1060] Shimada, H., Park, H., Makizako, H., Doi, T., Lee, S., & Suzuki, T. (2014). Depressive symptoms and cognitive performance in older adults. *Journal of Psychiatric Research, 57,* 149–156.

[1061] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[1062] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[1063] Searby, A., Maude, P., & McGrath, I. (2015). Dual diagnosis in older adults: A review. *Issues in Mental Health Nursing, 36*(2), 104–111.

[1064] Sacco, P., Unick, G. J., Zanjani, F., & Camlin, E. A. S. (2015). Hospital outcomes in major depression among older adults: Differences by alcohol comorbidity. *Journal of Dual Diagnosis, 11*(1), 83–92.

[1065] Bartels, S. J., Coakley, E., Oxman, T. E., Constantino, G., Oslin, D., Chen, H., … Sanchez, H. (2002). Suicidal and death ideation in older primary care patients with depression, anxiety, and at-risk alcohol use. *American Journal of Geriatric Psychiatry, 4,* 417–427.

[1066] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[1067] Searby, A., Maude, P., & McGrath, I. (2015). Dual diagnosis in older adults: A review. *Issues in Mental Health Nursing, 36*(2), 104–111.

[1068] Kuring, J. K., Mathias, J. L., & Ward, L. (2018). Prevalence of depression, anxiety and PTSD in people with dementia: A systematic review and meta-analysis. *Neuropsychology Reviews, 28*(4), 393–416.

[1069] Mowbray, O., Washington, T., Purser, G., & O'Shields, J. (2017). Problem drinking and depression in older adults with multiple chronic health conditions. *Journal of the American Geriatrics Society, 65*(1), 146–152.

[1070] Hunt, S. A., Kay-Lambkin, F. J., Baker, A. L., & Michie, P. T. (2015). Systematic review of neurocognition in people with co-occurring alcohol misuse and depression. *Journal of Affective Disorders, 179,* 51–64.

[1071] Bennett, S., & Thomas, A. J. (2014). Depression and dementia: Cause, consequence or coincidence? *Maturitas, 79*(2), 184–190.

[1072] Ownby, R. L., Crocco, E., Acevedo, A., John, V., & Loewenstein, D. (2006). Depression and risk for Alzheimer's disease: Systematic review, meta-analysis, and metaregression analysis. *Archives of General Psychiatry, 63,* 530–538.

[1073] Diniz, B. S., Butters, M. A., Albert, S. M., Dew, M. A., & Reynolds, C. F. (2013). Late-life depression and risk of vascular dementia and Alzheimer's disease: Systematic review and meta-analysis of community-based cohort studies. *British Journal of Psychiatry, 202*(5), 329–335.

[1074] Spira, A. P., Rebok, G. W., Stone, K. L., Kramer, J. H., & Yaffe, K. (2012). Depressive symptoms in oldest-old women: Risk of mild cognitive impairment and dementia. *American Journal of Geriatric Psychiatry, 20*(12), 1006–1015.

[1075] da Silva, J., Gonçalves-Pereira, M., Xavier, M., & Mukaetova-Ladinska, E. B. (2013). Affective disorders and risk of developing dementia: Systematic review. *British Journal of Psychiatry, 202*(3), 177–186.

[1076] Bower, E. S., Wetherell, J. L., Mon, T., & Lenze, E. J. (2015). Treating anxiety disorders in older adults: Current treatments and future directions. *Harvard Review of Psychiatry, 23*(5), 329–342.

[1077] Reynolds, K., Pietrzak, R. H., El-Gabalawy, R., Mackenzie, C. S., & Sareen, J. (2015). Prevalence of psychiatric disorders in U.S. older adults: Findings from a nationally representative survey. *World Psychiatry, 14*(1), 74–81.

[1078] Wolitzky-Taylor, K. B., Castriotta, N., Lenze, E. J., Stanley, M. A., & Craske, M. G. (2010). Anxiety disorders in older adults: A comprehensive review. *Depression and Anxiety, 27*(2), 190–211.

[1079] Reynolds, K., Pietrzak, R. H., El-Gabalawy, R., Mackenzie, C. S., & Sareen, J. (2015). Prevalence of psychiatric disorders in U.S. older adults: Findings from a nationally representative survey. *World Psychiatry, 14*(1), 74–81.

[1080] Lin, J. C., Karno, M. P., Grella, C. E., Ray, L. A., Liao, D. H., & Moore, A. A. (2014). Psychiatric correlates of alcohol and tobacco use disorders in U.S. adults aged 65 years and older: Results from the 2001–2002 National Epidemiologic Survey of Alcohol and Related Conditions. *American Journal of Geriatric Psychiatry, 22*(11), 1356–1363.

[1081] Wu, L. T., & Blazer, D. G. (2014). Substance use disorders and psychiatric comorbidity in mid and later life: A review. *International Journal of Epidemiology, 43*(2), 304–317.

[1082] Mackenzie, C. S., El-Gabalawy, R., Chou, K. L., & Sareen, J. (2014). Prevalence and predictors of persistent versus remitting mood, anxiety, and substance disorders in a national sample of older adults. *American Journal of Geriatric Psychiatry, 22*(9), 854–865.

[1083] Schutte, K., Lemke, S., Moos, R. H., & Brennan, P. L. (2015). Age-sensitive psychosocial treatment for older adults with substance abuse. In I. Crome, L.-T. Wu, R. T. Rao, & P. Crome (Eds.), *Substance use and older people* (pp. 314–339). West Sussex, UK: Wiley-Blackwell.

[1084] Beaudreau, S. A., & O'Hara, R. (2008). Late-life anxiety and cognitive impairment: A review. *American Journal of Geriatric Psychiatry, 16*(10), 790–803.

[1085] Beaudreau, S. A., & O'Hara, R. (2008). Late-life anxiety and cognitive impairment: A review. *American Journal of Geriatric Psychiatry, 16*(10), 790–803.

[1086] Lin, J. C., Karno, M. P., Grella, C. E., Ray, L. A., Liao, D. H., & Moore, A. A. (2014). Psychiatric correlates of alcohol and tobacco use disorders in U.S. adults aged 65 years and older: Results from the 2001–2002 National Epidemiologic Survey of Alcohol and Related Conditions. *American Journal of Geriatric Psychiatry, 22*(11), 1356–1363.

[1087] Kuring, J. K., Mathias, J. L., & Ward, L. (2018). Prevalence of depression, anxiety and PTSD in people with dementia: A systematic review and meta-analysis. *Neuropsychology Reviews, 28*(4), 393–416.

[1088] Burton, C., Campbell, P., Jordan, K., Strauss, V., & Mallen, C. (2013). The association of anxiety and depression with future dementia diagnosis: A case-control study in primary care. *Family Practice, 30*(1), 25–30.

[1089] Burton, C., Campbell, P., Jordan, K., Strauss, V., & Mallen, C. (2013). The association of anxiety and depression with future dementia diagnosis: A case-control study in primary care. *Family Practice, 30*(1), 25–30.

[1090] Burton, C., Campbell, P., Jordan, K., Strauss, V., & Mallen, C. (2013). The association of anxiety and depression with future dementia diagnosis: A case-control study in primary care. *Family Practice, 30*(1), 25–30.

[1091] Gulpers, B., Ramakers, I., Hamel, R., Köhler, S., Oude Voshaar, R., & Verhey, F. (2016). Anxiety as a predictor for cognitive decline and dementia: A systematic review and meta-analysis. *American Journal of Geriatric Psychiatry, 24*(10), 823–842.

[1092] Andreescu, C., & Varon, D. (2015). New research on anxiety disorders in the elderly and an update on evidence-based treatments. *Current Psychiatry Reports, 17*(7), 53.

[1093] Reynolds, K., Pietrzak, R. H., El-Gabalawy, R., Mackenzie, C. S., & Sareen, J. (2015). Prevalence of psychiatric disorders in U.S. older adults: Findings from a nationally representative survey. *World Psychiatry, 14*(1), 74–81.

[1094] Pietrzak, R. H., Goldstein, R. B., Southwick, S. M., & Grant, B. F. (2012). Psychiatric comorbidity of full and partial posttraumatic stress disorder among older adults in the United States: Results from Wave 2 of the National Epidemiologic Survey on Alcohol and Related Conditions. *American Journal of Geriatric Psychiatry, 20*(5), 380–390.

[1095] Kuring, J. K., Mathias, J. L., & Ward, L. (2018). Prevalence of depression, anxiety and PTSD in people with dementia: A systematic review and meta-analysis. *Neuropsychological Reviews, 28*(4), 393–416.

[1096] Kang, B., Xu, H., & McConnell, E. S. (2019). Neurocognitive and psychiatric comorbidities of posttraumatic stress disorder among older veterans: A systematic review. *International Journal of Geriatric Psychiatry, 34*(4), 522–538.

[1097] Substance Abuse and Mental Health Services Administration. (2014). *SAMHSA's concept of trauma and guidance for a trauma-informed approach.* Retrieved from https://store.samhsa.gov/product/SAMHSA-s-Concept-of-Trauma-and-Guidance-for-a-Trauma-Informed-Approach/SMA14-4884

[1098] Substance Abuse and Mental Health Services Administration. (2014). *Trauma-informed care in behavioral health services.* Treatment Improvement Protocol (TIP) Series 57. HHS Publication No. (SMA) 13-4801. Retrieved from https://store.samhsa.gov/product/TIP-57-Trauma-Informed-Care-in-Behavioral-Health-Services/SMA14-4816

[1099] Hiskey, S., & McPherson, S. (2013). That's just life: Older adult constructs of trauma. *Aging and Mental Health, 17*(6), 689–696.

[1100] Searby, A., Maude, P., & McGrath, I. (2015). Dual diagnosis in older adults: A review. *Issues in Mental Health Nursing, 36*(2), 104–111.

[1101] Wu, L. T., & Blazer, D. G. (2014). Substance use disorders and psychiatric comorbidity in mid and later life: A review. *International Journal of Epidemiology, 43*(2), 304–317.

[1102] Lin, J. C., Karno, M. P., Grella, C. E., Ray, L. A., Liao, D. H., & Moore, A. A. (2014). Psychiatric correlates of alcohol and tobacco use disorders in U.S. adults aged 65 years and older: Results from the 2001–2002 National Epidemiologic Survey of Alcohol and Related Conditions. *American Journal of Geriatric Psychiatry, 22*(11), 1356–1363.

[1103] Balsamo, M., Cataldi, F., Carlucci, L., & Fairfield, B. (2018). Assessment of anxiety in older adults: A review of self-report measures. *Clinical Interventions in Aging, 13,* 573–593.

[1104] Wuthrich, V. M., Johnco, C., & Knight, A. (2014). Comparison of the Penn State Worry Questionnaire (PSWQ) and abbreviated version (PSWQ-A) in a clinical and non-clinical population of older adults. *Journal of Anxiety Disorders, 28*(7), 657–663.

[1105] Pietrzak, R. H., Goldstein, R. B., Southwick, S. M., & Grant, B. F. (2012). Psychiatric comorbidity of full and partial posttraumatic stress disorder among older adults in the United States: Results from Wave 2 of the National Epidemiologic Survey on Alcohol and Related Conditions. *American Journal of Geriatric Psychiatry, 20*(5), 380–390.

[1106] Satre, D. D., & Leibowitz, A. (2015). Brief alcohol and drug interventions and motivational interviewing. In P. Areán (Ed.), *Treatment of late-life depression, anxiety, trauma and substance abuse* (pp. 163–180). Washington, DC: American Psychological Association.

[1107] Satre, D. D., & Leibowitz, A. (2015). Brief alcohol and drug interventions and motivational interviewing. In P. Areán (Ed.), *Treatment of late-life depression, anxiety, trauma and substance abuse* (pp. 163–180). Washington, DC: American Psychological Association.

[1108] Oyebode, J. R., & Parveen, S. (2019). Psychosocial interventions for people with dementia: An overview and commentary on recent developments. *Dementia (London), 18*(1), 8–35.

[1109] de Oliveira, A. M., Radanovic, M., de Mello, P. C., Buchain, P. C., Vizzotto, A. D., … Forlenza, O. V. (2015). Nonpharmacological interventions to reduce behavioral and psychological symptoms of dementia: A systematic review. *BioMed Research International,* 218980.

[1110] Bernabei, V., De Ronchi, D., La Ferla, T., Moretti, F., Tonelli, L., Ferrari, B., … Atti, A. R. (2013). Animal-assisted interventions for elderly patients affected by dementia or psychiatric disorders: A review. *Journal of Psychiatric Research, 47*(6), 762–773.

[1111] Rooney, R. F. (2014). Preventing dementia: How lifestyle in midlife affects risk. *Current Opinion in Psychiatry, 27*(2), 149–157.

[1112] Yaffe, K., & Hoang, T. (2013). Nonpharmacologic treatment and prevention strategies for dementia. *Continuum (Minneapolis, Minnesota), 19*(2 Dementia), 372–381.

[1113] Cipriani, G., Lucetti, C., Danti, S., & Nuti, A. (2015). Sleep disturbances and dementia. *Psychogeriatrics, 15*(1), 65–74.

[1114] Lindauer, A., Sexson, K., & Harvath, T. A (2017). Medication management for people with dementia. *American Journal of Nursing, 117*(2), 60–64.

[1115] AARP and National Alliance for Caregiving. (2020). *Caregiving in the U.S. 2020.* Retrieved from www.caregiving.org/caregiving-in-the-us-2020/

[1116] National Association of Social Workers. (2010). *NASW standards for social work practice with family caregivers of older adults.* Retrieved from www.socialworkers.org/LinkClick.aspx?fileticket=aUwQL98exRM%3d&portalid=0

[1117] Chiao, C. Y., Wu, H. S., & Hsiao, C. Y. (2015). Caregiver burden for informal caregivers of patients with dementia: A systematic review. *International Nursing Review, 62*(3), 340–350.

[1118] Moon, H., & Dilworth-Anderson, P. (2015). Baby boomer caregiver and dementia caregiving: Findings from the National Study of Caregiving. *Age and Ageing, 44*(2), 300–306.

[1119] Dong, X., Chen, R., & Simon, M. A. (2014). Elder abuse and dementia: A review of the research and health policy. *Health Affairs (Millwood), 33*(4), 642–649.

[1120] Perkins, M., Howard, V. J., Wadley, V. G., Crowe, M., Safford, M. M., Haley, W. E., … Roth, D. L. (2013). Caregiving strain and all-cause mortality: Evidence from the REGARDS study. *Journal of Gerontology, Series B, Psychological Sciences and Social Sciences, 68*(4), 504–512.

[1121] Kim, Y., Carver, C. S., Cannady, R. S., & Shaffer, K. M. (2013). Self-reported medical morbidity among informal caregivers of chronic illness: The case of cancer. *Quality of Life Research, 22*(6), 1265–1272.

[1122] Fonareva, I., & Oken, B. S. (2014). Physiological and functional consequences of caregiving for relatives with dementia. *International Psychogeriatrics, 26*(5), 725–747.

[1123] Martín-Carrasco, M., Ballesteros-Rodríguez, J., Domínguez-Panchón, A. I., Muñoz-Hermoso, P., & González-Fraile, E. (2014). Interventions for caregivers of patients with dementia. *Actas Españolas de Psiquiatría, 42*(6), 300–314.

[1124] Brodaty, H., & Donkin, M. (2009). Family caregivers of people with dementia. *Dialogues in Clinical Neuroscience, 11*(2), 217–228.

[1125] Gilhooly, K. J., Gilhooly, M. L., Sullivan, M. P., McIntyre, A., Wilson, L., Harding, E., … Crutch, S. (2016). A meta-review of stress, coping and interventions in dementia and dementia caregiving. *BMC Geriatrics, 16*, 106.

[1126] Sattar, S. P., Padala, P. R., McArthur-Miller, D., Roccaforte, W. H., Wengel, S. P., & Burke, W. J. (2007). Impact of problem alcohol use on patient behavior and caregiver burden in a geriatric assessment clinic. *Journal of Geriatric Psychiatry and Neurology, 20*(2), 120–127.

[1127] García-Fernández, F. P., Arrabal-Orpez, M. J., Rodríguez-Torres Mdel, C., Gila-Selas, C., Carrascosa-García, I., & Laguna-Parras, J. M. (2014). Effect of hospital case-manager nurses on the level of dependence, satisfaction and caregiver burden in patients with complex chronic disease. *Journal of Clinical Nursing, 23*(19–20), 2814–2821.

[1128] Labrum, T. (2018). Caregiving for relatives with psychiatric disorders vs. co-occurring psychiatric and substance use disorders. *Psychiatric Quarterly, 89*(3), 631–644.

[1129] Yesavage, J. A. (n.d.). Geriatric Depression Scale. Retrieved from https://web.stanford.edu/~yesavage/GDS.html

[1130] Brown, E. L., Raue, P. J., & Halpert, K. (2015). Evidence-based practice guideline: Depression detection in older adults with dementia. *Journal of Gerontological Nursing, 41*(11), 15–21.

[1131] Brown, E. L., Raue, P. J., & Halpert, K. (2015). Evidence-based practice guideline: Depression detection in older adults with dementia. *Journal of Gerontological Nursing, 41*(11), 15–21.

[1132] Brown, E. L., Raue, P. J., & Halpert, K. (2015). Evidence-based practice guideline: Depression detection in older adults with dementia. *Journal of Gerontological Nursing, 41*(11), 15–21.

[1133] Weathers, F. W., Litz, B. T., Keane, T. M., Palmieri, P. A., Marx, B. P., & Schnurr, P. P. (2013). The PTSD Checklist for DSM-5 (PCL-5). Retrieved from https://www.ptsd.va.gov/professional/assessment/adult-sr/ptsd-checklist.asp

[1134] Family Caregiver Alliance. (2019). Caregiver statistics: Demographics. Retrieved from www.caregiver.org/caregiver-statistics-demographics

[1135] American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

[1136] American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

[1137] Satre, D. D., Chi, F. W., Mertens, J. R., & Weisner, C. M. (2012). Effects of age and life transitions on alcohol and drug treatment outcome over nine years. *Journal of Studies on Alcohol and Drugs, 73*(3), 459–468.

[1138] Nicholson, N. R. (2012). A review of social isolation: An important but underassessed condition in older adults. *Journal of Primary Prevention, 33*(2–3), 137–152.

[1139] Koenig, H. G. (2015). Religion, spirituality, and health: A review and update. *Advances, 29*(3), 19–26.

[1140] Zimmer, Z., Jagger, C., Chiu, C. T., Ofstedal, M. B., Rojo, F., & Saito, Y. (2016). Spirituality, religiosity, aging and health in global perspective: A review. *SSM-Population Health, 2,* 373–381.

[1141] Zimmer, Z., Jagger, C., Chiu, C. T., Ofstedal, M. B., Rojo, F., & Saito, Y. (2016). Spirituality, religiosity, aging and health in global perspective: A review. *SSM-Population Health, 2,* 373–381.

[1142] Koenig, H. G. (2012). Religion, spirituality, and health: The research and clinical implications. *ISRN Psychiatry, 2012,* 278730.

[1143] Zimmer, Z., Jagger, C., Chiu, C. T., Ofstedal, M. B., Rojo, F., & Saito, Y. (2016). Spirituality, religiosity, aging and health in global perspective: A review. *SSM-Population Health, 2,* 373–381.

[1144] Kim, S., Spilman, S. L., Liao, D. H., Sacco, P., & Moore, A. A. (2018). Social networks and alcohol use among older adults: A comparison with middle-aged adults. *Aging and Mental Health, 22*(4), 550–557.

[1145] Cohen-Mansfield, J., Hazan, H., Lerman, Y., & Shalom, V. (2016). Correlates and predictors of loneliness in older-adults: A review of quantitative results informed by qualitative insights. *International Psychogeriatrics, 28*(4), 557–576.

[1146] Gardiner, C., Geldenhuys, G., & Gott, M. (2018). Interventions to reduce social isolation and loneliness among older people: An integrative review. *Health and Social Care in the Community, 26*(2), 147–157.

[1147] Nicholson, N. R. (2012). A review of social isolation: An important but underassessed condition in older adults. *Journal of Primary Prevention, 33*(2–3), 137–152.

[1148] Mannes, Z. L., Burrell, L. E., Bryant, V. E., Dunne, E. M., Hearn, L. E., & Whitehead, N. E. (2016). Loneliness and substance use: The influence of gender among HIV+ Black/African American adults 50+. *AIDS Care, 28*(5), 598–602.

[1149] Rainer, J. P. (2013). *Life after loss: Contemporary grief counseling and therapy.* Eau Claire, WI: PESI Publishing & Media.

[1150] Winokuer, H. R., & Harris, D. L. (2015). *Principles and practice of grief counseling* (2nd ed.). New York, NY: Springer.

[1151] Nicholson, N. R. (2012). A review of social isolation: An important but underassessed condition in older adults. *Journal of Primary Prevention, 33*(2–3), 137–152.

[1152] Wethington, E., & Pillemer, K. (2014). Social isolation among older people. In R. J. Coplan & J. C. Bowker (Eds.), *The handbook of solitude: Psychological perspectives on social isolation, social withdrawal, and being alone* (pp. 242–259). Chichester, England: Wiley-Blackwell.

[1153] Bhatti, A. B., & Haq, A. U. (2017). The pathophysiology of perceived social isolation: Effects on health and mortality. *Cureus, 9*(1), e994. doi:10.7759/cureus.994

[1154] Cacioppo, J. T., Hawkley, L. C., Norman, G. J., & Berntson, G. G. (2011). Social isolation. *Annals of the New York Academy of Sciences, 1231,* 17–22.

[1155] Bhatti, A. B., & Haq, A. U. (2017). The pathophysiology of perceived social isolation: Effects on health and mortality. *Cureus, 9*(1), e994. doi:10.7759/cureus.994

[1156] Cacioppo, J. T., Hawkley, L. C., Norman, G. J., & Berntson, G. G. (2011). Social isolation. *Annals of the New York Academy of Sciences, 1231,* 17–22.

[1157] Wethington, E., & Pillemer, K. (2014). Social isolation among older people. In R. J. Coplan & J. C. Bowker (Eds.), *The handbook of solitude: Psychological perspectives on social isolation, social withdrawal, and being alone* (pp. 242–259). Chichester, England: Wiley-Blackwell.

[1158] Bhatti, A. B., & Haq, A. U. (2017). The pathophysiology of perceived social isolation: Effects on health and mortality. *Cureus, 9*(1), e994. doi:10.7759/cureus.994

[1159] Nicholson, N. R. (2012). A review of social isolation: An important but underassessed condition in older adults. *Journal of Primary Prevention, 33*(2–3), 137–152.

[1160] Doukas, N. (2017). Older adults prescribed methadone for opiate replacement therapy: A literature review. *Journal of Addiction and Preventive Medicine, 2*(1), 1–6.

[1161] Wethington, E., & Pillemer, K. (2014). Social isolation among older people. In R. J. Coplan & J. C. Bowker (Eds.), *The handbook of solitude: Psychological perspectives on social isolation, social withdrawal, and being alone* (pp. 242–259). Chichester, England: Wiley-Blackwell.

[1162] Gouveia, O. M. R., Matos, A. D., & Schouten, M. J. (2016). Social networks and quality of life of elderly persons: A review and critical analysis of literature. *Revista Brasileira de Geriatria e Gerontologia, 19,* 1030–1040.

[1163] Gardiner, C., Geldenhuys, G., & Gott, M. (2018). Interventions to reduce social isolation and loneliness among older people: An integrative review. *Health and Social Care in the Community, 26*(2), 147–157.

[1164] Gardiner, C., Geldenhuys, G., & Gott, M. (2018). Interventions to reduce social isolation and loneliness among older people: An integrative review. *Health and Social Care in the Community, 26*(2), 147–157.

[1165] Momtaz, Y. A., Haron, S. A., Ibrahim, R., & Hamid, T. A. (2014). Social embeddedness as a mechanism for linking social cohesion to well-being among older adults: Moderating effect of gender. *Clinical Interventions in Aging, 9,* 863–870.

[1166] Jackson, S. L. (2014). All elder abuse perpetrators are not alike: The heterogeneity of elder abuse perpetrators and implications for intervention. *International Journal of Offender Therapy and Comparative Criminology, 60*(3), 265–285.

[1167] Bassuk, E. L., Hanson, J., Greene, R. N., Richard, M., & Laudet, A. (2016). Peer-delivered recovery support services for addictions in the United States: A systematic review. *Journal of Substance Abuse Treatment, 63,* 1–9.

[1168] Reif, S., Braude, L., Lyman, D. R., Dougherty, R. H., Daniels, A. S., Ghose, S. S., … Delphin-Rittmon, M. E. (2014). Peer recovery support for individuals with substance use disorders: Assessing the evidence. *Psychiatric Services, 65*(7), 853–861.

[1169] Stevens, E., Jason, L. A., Ram, D., & Light, J. (2015). Investigating social support and network relationships in substance use disorder recovery. *Substance Abuse, 36*(4), 396–399.

[1170] Bassuk, E. L., Hanson, J., Greene, R. N., Richard, M., & Laudet, A. (2016). Peer-delivered recovery support services for addictions in the United States: A systematic review. *Journal of Substance Abuse Treatment, 63,* 1–9.

[1171] Center for Substance Abuse Treatment. (2009). *What are peer recovery support services?* HHS Publication No. (SMA) 09-4454. Retrieved from https://store.samhsa.gov/product/What-Are-Peer-Recovery-Support-Services-/SMA09-4454

[1172] Gardiner, C., Geldenhuys, G., & Gott, M. (2018). Interventions to reduce social isolation and loneliness among older people: An integrative review. *Health and Social Care in the Community, 26*(2), 147–157.

[1173] Leist, A. K. (2013). Social media use of older adults: A mini-review. *Gerontology, 59*(4), 378–384.

[1174] Anderson, M., & Perrin, A. (2017). Tech adoption climbs among older adults. Retrieved June 13, 2019, from http://assets.pewresearch.org/wp-content/uploads/sites/14/2017/05/16170850/PI_2017.05.17_Older-Americans-Tech_FINAL.pdf

[1175] Kuerbis, A., Mulliken, A., Muench, F., Moore, A. A., & Gardner, D. (2017). Older adults and mobile technology: Factors that enhance and inhibit utilization in the context of behavioral health. *Mental Health and Addiction Research, 2*(2), 1–11.

[1176] Fang, M. L., Canham, S. L., Battersby, L., Sixsmith, J., Wada, M., & Sixsmith, A. (2019). Exploring privilege in the digital divide: Implications for theory, policy, and practice. *Gerontologist, 59*(1), e1–e15.

[1177] Federal Communications Commission. (2018). 2018 broadband deployment report. Retrieved from www.fcc.gov/reports-research/reports/broadband-progress-reports/2018-broadband-deployment-report

[1178] Chernick, R., & Kuerbis, A. (2016). Social and familial contexts for drinking among older adults. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 149–166). New York, NY: Springer.

[1179] Fishleder, S., Schonfeld, L., Corvin, J., Tyler, S., & VandeWeerd, C. (2016). Drinking behavior among older adults in a planned retirement community: Results from The Villages survey. *International Journal of Geriatric Psychiatry, 31*(5), 536–543.

[1180] Kobrin, M. (2019). Promoting wellness for better behavioral and physical health. Retrieved from https://mfpcc.samhsa.gov/ENewsArticles/Article12b_2017.aspx

[1181] McMahon, S., & Fleury, J. (2012). Wellness in older adults: A concept analysis. *Nursing Forum, 47*(1), 39–51.

[1182] Kobrin, M. (2019). Promoting wellness for better behavioral and physical health. Retrieved from https://mfpcc.samhsa.gov/ENewsArticles/Article12b_2017.aspx

[1183] Substance Abuse and Mental Health Services Administration. (2016). Learn the eight dimensions of wellness. Retrieved from https://store.samhsa.gov/product/Learn-the-Eight-Dimensions-of-Wellness-Poster-/SMA16-4953

[1184] Gerontological Society of America. (2012). Communicating with older adults: An evidence-based review of what really works. Retrieved from www.changetogether.com/app/uploads/2016/03/GSA_Communicating-with-Older-Adults-high-Final.pdf

[1185] Satre, D. D., & Leibowitz, A. (2015). Brief alcohol and drug interventions and motivational interviewing. In P. Areán (Ed.), *Treatment of late-life depression, anxiety, trauma and substance abuse* (pp. 163–180). Washington, DC: American Psychological Association.

[1186] Cummings, S. M., Cooper, R. L., & Cassie, K. M. (2009). Motivational interviewing to affect behavioral change in older adults. *Research on Social Work Practice, 19*(2), 195–204.

[1187] Purath, J., Keck, A., & Fitzgerald, C. E. (2014). Motivational interviewing for older adults in primary care: A systematic review. *Geriatric Nursing, 35*(3), 219–224.

[1188] Cherniack, E. P., & Cherniack, A. R. (2014). The benefit of pets and animal-assisted therapy to the health of older individuals. *Current Gerontology and Geriatrics Research, 2014,* 1–9.

[1189] Harvard Women's Health Watch. (2015). The health benefits of tai chi. Retrieved from www.health.harvard.edu/staying-healthy/the-health-benefits-of-tai-chi

[1190] Hackney, M. E., & Wolf, S. L. (2014). Impact of Tai Chi Chu'an practice on balance and mobility in older adults: An integrative review of 20 years of research. *Journal of Geriatric Physical Therapy, 37*(3), 127–135.

[1191] Irwin, M. R., Olmstead, R., & Motivala, S. J. (2008). Improving sleep quality in older adults with moderate sleep complaints: A randomized controlled trial of Tai Chi Chih. *Sleep, 31*(7), 1001–1008.

[1192] Fountain-Zaragoza, S., & Prakash, R. S. (2017). Mindfulness training for healthy aging: Impact on attention, well-being, and inflammation. *Frontiers in Aging Neuroscience, 9,* 1–15.

[1193] Krause, N., & Hayward, R. D. (2014). Religious involvement, practical wisdom, and self-rated health. *Journal of Aging and Health, 26*(4), 540–558.

[1194] Kelly, J. F., Stout, R. L., Magill, M., Tonigan, J. S., & Pagano, M. E. (2011). Spirituality in recovery: A lagged mediational analysis of Alcoholics Anonymous' principal theoretical mechanism of behavior change. *Alcoholism, Clinical and Experimental Research, 35*(3), 454–463.

[1195] Zimmer, Z., Jagger, C., Chiu, C. T., Ofstedal, M. B., Rojo, F., & Saito, Y. (2016). Spirituality, religiosity, aging and health in global perspective: A review. *SSM-Population Health, 2,* 373–381.

[1196] Ponnuswami, I., Francis, A., & Udhayakumar, P. (2012). *Strengths-based approach to social work practice with older persons.* Retrieved from www.academia.edu/3470933/Strengths-based_Approach_to_Social_Work_Practice_with_Older_Persons

[1197] National Council on Aging. (2016). *Fact sheet: Chronic disease self-management.* Arlington, VA: National Council on Aging. Retrieved from www.ncoa.org/resources/fact-sheet-cdsmp

[1198] Schulman-Green, D., Jaser, S. S., Park, C., & Whittemore, R. (2016). A metasynthesis of factors affecting self-management of chronic illness. *Journal of Advanced Nursing, 72*(7), 1469–1489.

[1199] National Council on Aging. (2016). *Fact sheet: Chronic disease self-management.* Arlington, VA: National Council on Aging. Retrieved from www.ncoa.org/resources/fact-sheet-cdsmp

[1200] Erdem, E., & Korda, H. (2014). Self-management program participation by older adults with diabetes: Chronic Disease Self-Management Program and Diabetes Self-Management Program. *Family and Community Health, 37*(2), 134–146.

[1201] Satre, D. D., Mertens, J. R., Areán, P. A., & Weisner, C. (2004). Five-year alcohol and drug treatment outcomes of older adults versus middle-aged and younger adults in a managed care program. *Addiction, 99*(10), 1286–1297.

[1202] Litt, M. D., Kadden, R. M., Kabela-Cormier, E., & Petry, N. M. (2009). Changing network support for drinking: Network Support Project 2-year follow-up. *Journal of Consulting and Clinical Psychology, 77*(2), 229–242.

[1203] Davidoff, J., Higgins, R., & Kipnis, S. (2004). Working with aging client populations: Preventing, identifying and treating alcohol, and substance abuse and supporting recovery [Presentation slides]. Retrieved June 1, 2019, from https://omh.ny.gov/omhweb/geriatric/resources.html

[1204] Davidoff, J., Higgins, R., & Kipnis, S. (2004). Working with aging client populations: Preventing, identifying and treating alcohol & substance abuse and supporting recovery [Presentation slides]. Retrieved June 1, 2019, from https://omh.ny.gov/omhweb/geriatric/resources.html

[1205] Schonfeld, L., & MacFarland, N. S. (2015). Relapse prevention treatment for substance abuse disorders in older adults. In P. A. Areán (Ed.), *Treatment of late-life depression, anxiety, trauma, and substance abuse* (pp. 211–234). Washington, DC: American Psychological Association.

[1206] Burzinski, C. A., & Zgierska, A. (2014). Reducing relapse risk: Clinical tool. Retrieved from http://projects.hsl.wisc.edu/SERVICE/modules/35/M35_CT_Reducing_Relapse_Risk.pdf

[1207] Alim, T. N., Lawson, W. B., Feder, A., Iacoviello, B. M., Saxena, S., Bailey, C. R., … Neumeister, A. (2012). Resilience to meet the challenge of addiction: Psychobiology and clinical considerations. *Alcohol Research: Current Reviews, 34*(4), 506–515.

[1208] Nilsson, H., Bülow, P. H., & Kazemi, A. (2015). Mindful sustainable aging: Advancing a comprehensive approach to the challenges and opportunities of old age. *Europe's Journal of Psychology, 11*(3), 494–508.

[1209] American Psychological Association. (2014). Guidelines for psychological practice with older adults. *American Psychologist, 69*(1), 34–65.

[1210] Hildon, Z., Smith, G., Netuveli, G., & Blane, D. (2008). Understanding adversity and resilience at older ages. *Sociology of Health and Illness, 30*(5), 726–740.

[1211] Walter, C. A., & McCoyd, J. L. M. (2015). *Grief and loss across the lifespan: A biopsychosocial perspective* (2nd ed.). New York, NY: Springer.

[1212] Slosser, A., McKibbin, C., Lee, A., Bourassa, K., & Carrico, C. (2015). Perceived health status and social network as predictors of resilience in rural older adults. Retrieved from www.uwyo.edu/wycoa/_files/powerpoints/as_gsa%20poster%202015.pdf

[1213] American Psychological Association. (2018). Building your resilience. Retrieved from www.apa.org/helpcenter/road-resilience

[1214] Lavretsky, H. (2014). *Resilience and aging: Research and practice*. Baltimore, MD: Johns Hopkins University Press.

[1215] Bovend'Eerdt, T. J. H., Botell, R. E., & Wade, D. T. (2009). Writing SMART rehabilitation goals and achieving goal attainment scaling: A practical guide. *Clinical Rehabilitation, 23*(4), 352–361.

[1216] National Committee for Quality Assurance. (2016). Goals to care: How to keep the person in "person-centered." Retrieved from www.ncqa.org/Portals/0/Programs/Goals%20to%20Care%20-%20Spotlight%20Report.pdf?ver=2016-02-23-113526-113

[1217] Tracy, E., & Whittaker, J. (1990). The Social Network Map: Assessing social support in clinical practice. *Families in Society, 71,* 461–470.

[1218] Tracy, E., & Whittaker, J. (1990). The Social Network Map: Assessing social support in clinical practice. *Families in Society, 71,* 461–470.

[1219] Tracy, E., & Whittaker, J. (1990). The Social Network Map: Assessing social support in clinical practice. *Families in Society, 71,* 461–470.

[1220] Tracy, E., & Whittaker, J. (1990). The Social Network Map: Assessing social support in clinical practice. *Families in Society, 71,* 461–470.

[1221] Tracy, E., & Whittaker, J. (1990). The Social Network Map: Assessing social support in clinical practice. *Families in Society, 71,* 461–470.

[1222] Lubben, J., & Gironda, M. (2004). Measuring social networks and assessing their benefits. In C. Phillipson, G. Allan, & D. Morgan (Eds.), *Social networks and social exclusion: Sociological and policy perspectives* (pp. 20–35). Aldershot, England: Ashgate.

[1223] Lubben, J., Blozik, E., Gillmann, G., Iliffe, S., von Renteln Kruse, W., Beck, J. C., & Stuck, A. E. (2006). Performance of an abbreviated version of the Lubben Social Network Scale among three European community-dwelling older adult populations. *Gerontologist, 46*(4), 503–513.

[1224] Lubben, J., Blozik, E., Gillmann, G., Iliffe, S., von Renteln Kruse, W., Beck, J. C., & Stuck, A. E. (2006). Performance of an abbreviated version of the Lubben Social Network Scale among three European community-dwelling older adult populations. *Gerontologist, 46*(4), 503–513.

[1225] Gabrielson, M. L., & Holston, E. C. (2014). Broadening definitions of family for older lesbians: Modifying the Lubben Social Network Scale. *Journal of Gerontological Social Work, 57*(2–4), 198–217.

[1226] White, A. M., Philogene, G. S., Fine, L., & Sinha, S. (2009). Social support and self-reported health status of older adults in the United States. *American Journal of Public Health, 99*(10), 1872–1878.

[1227] Hwang, E. H., & Peralta-Catipon, T. (2016). *Health Enhancement Lifestyle Profile (HELP) & HELP Screener: Older adult version; Guide for clinicians.* Dominguez Hills, CA: California State University. Retrieved from www.csudh.edu/Assets/csudh-sites/ot/docs/3%20Health%20Enhancement%20Lifestyle%20Profile%20(HELP)-Guide%20for%20Clinicians-2016.pdf

[1228] Miller, W. R., & Rollnick, S. (2013). *Motivational interviewing: Helping people change* (3rd ed.). New York, NY: Guilford Press.

[1229] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[1230] Barry, K. L., & Blow, F. C. (2016). Drinking over the lifespan: Focus on older adults. *Alcohol Research, 38*(1), 115–120.

[1231] Oslin, D. W., & Zanjani, F. (2016). Treatment of unhealthy alcohol use in older adults. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 181–199). New York, NY: Springer.

[1232] Kok, R. M. (2014). Treatment of alcohol use disorders in the elderly: An overview of RCTs. *International Psychogeriatrics, 26*(11), 1767–1770.

[1233] Barry, K. L., & Blow, F. C. (2016). Drinking over the lifespan: Focus on older adults. *Alcohol Research, 38*(1), 115–120.

[1234] Schutte, K. K., Moos, R. H., & Brennan, P. L. (2006). Predictors of untreated remission from late-life drinking problems. *Journal of Studies on Alcohol, 67*(3), 354–362.

[1235] American Public Health Association & Education Development Center. (2008). *Alcohol screening and brief intervention: A guide for public health practitioners.* Washington, DC: National Highway Traffic Safety Administration, Department of Transportation.

[1236] National Institute on Alcohol Abuse and Alcoholism. (n.d.). Drinking levels defined. Retrieved from www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

[1237] U.S. Department of Health and Human Services & U.S. Department of Agriculture. (2015). *2015–2020 Dietary Guidelines for Americans* (8th ed.). Retrieved from https://health.gov/our-work/food-nutrition/2015-2020-dietary-guidelines

[1238] National Institute on Alcohol Abuse and Alcoholism. (n.d.). Drinking levels defined. Retrieved from www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

[1239] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[1240] Kaiser Permanente. (2019). Alcohol use in older adults. Retrieved from https://wa.kaiserpermanente.org/healthAndWellness/index.jhtml?item=%2Fcommon%2FhealthAndWellness%2FhealthyLiving%2Flifestyle%2Falcohol-seniors.html

[1241] Family Caregiver Alliance. (2019). Caregiver statistics: Demographics. Retrieved from www.caregiver.org/caregiver-statistics-demographics

[1242] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[1243] U.S. Department of Health and Human Services & U.S. Department of Agriculture. (2015). *2015–2020 Dietary Guidelines for Americans* (8th ed.). Retrieved from https://health.gov/our-work/food-nutrition/2015-2020-dietary-guidelines

[1244] National Institute on Alcohol Abuse and Alcoholism. (n.d.). Drinking levels defined. Retrieved from www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

[1245] Centers for Disease Control and Prevention. (2018). Alcohol and Public Health. Frequently Asked Questions. Retrieved from www.cdc.gov/alcohol/faqs.htm

[1246] U.S. Department of Health and Human Services & U.S. Department of Agriculture. (2015). *2015–2020 Dietary Guidelines for Americans* (8th ed.). Retrieved from https://health.gov/our-work/food-nutrition/2015-2020-dietary-guidelines

[1247] American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

[1248] U.S. Department of Health and Human Services & U.S. Department of Agriculture. (2015). *2015–2020 Dietary Guidelines for Americans* (8th ed.). Retrieved from https://health.gov/our-work/food-nutrition/2015-2020-dietary-guidelines

[1249] Centers for Disease Control and Prevention. (2018). Alcohol and Public Health. Frequently Asked Questions. Retrieved from www.cdc.gov/alcohol/faqs.htm

[1250] National Institute on Alcohol Abuse and Alcoholism. (n.d.). Drinking levels defined. Retrieved from www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

[1251] Kaiser Permanente. (2019). Alcohol use in older adults. Retrieved from https://wa.kaiserpermanente.org/healthAndWellness/index.jhtml?item=%2Fcommon%2FhealthAndWellness%2FhealthyLiving%2Flifestyle%2Falcohol-seniors.html

[1252] Downer, B., & Boron, J. B. (2016). Alcohol and cognition. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 79–96). New York, NY: Springer.

[1253] Downer, B., & Boron, J. B. (2016). Alcohol and cognition. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 79–96). New York, NY: Springer.

[1254] National Institute on Alcohol Abuse and Alcoholism. (2015). *Beyond hangovers: Understanding alcohol's impact on your health.* NIH Publication No. 15–7604. Rockville, MD: National Institute on Alcohol Abuse and Alcoholism.

[1255] GBD 2016 Collaborators. (2018). Alcohol use and burden for 195 countries and territories, 1990–2016: A systematic analysis for the Global Burden of Disease Study 2016. *Lancet, 392*(10152), 1015–1035.

[1256] Substance Abuse and Mental Health Services Administration. (2012). *Older Americans Behavioral Health Issue Brief 2: Alcohol misuse and abuse prevention* (p. 1). Retrieved from www.acl.gov/sites/default/files/programs/2016-11/Issue%20Brief%202%20Alcohol%20Misuse.pdf

[1257] Bommersbach, T. J., Lapid, M. I., Rummans, T. A., & Morse, R. M. (2015). Geriatric alcohol use disorder: A review for primary care physicians. *Mayo Clinic Proceedings, 90*(5), 659–666.

[1258] Substance Abuse and Mental Health Services Administration. (2012). *Older Americans Behavioral Health Issue Brief 2: Alcohol misuse and abuse prevention* (p. 1). Retrieved from www.acl.gov/sites/default/files/programs/2016-11/Issue%20Brief%202%20Alcohol%20Misuse.pdf

[1259] Bommersbach, T. J., Lapid, M. I., Rummans, T. A., & Morse, R. M. (2015). Geriatric alcohol use disorder: A review for primary care physicians. *Mayo Clinic Proceedings, 90*(5), 659–666.

[1260] Substance Abuse and Mental Health Services Administration. (2012). *Older Americans Behavioral Health Issue Brief 2: Alcohol misuse and abuse prevention* (p. 1). Retrieved from www.acl.gov/sites/default/files/programs/2016-11/Issue%20Brief%202%20Alcohol%20Misuse.pdf

[1261] Leggett, A., Kavanagh, J., Zivin, K., Chiang, C., Kim, H. M., & Kales, H. C. (2015). The association between benzodiazepine use and depression outcomes in older veterans. *Journal of Geriatric Psychiatry and Neurology, 28*(4), 281–287.

[1262] Substance Abuse and Mental Health Services Administration. (2012). *Older Americans Behavioral Health Issue Brief 2: Alcohol misuse and abuse prevention* (p. 1). Retrieved from www.acl.gov/sites/default/files/programs/2016-11/Issue%20Brief%202%20Alcohol%20Misuse.pdf

[1263] Barry, K. L., & Blow, F. C. (2016). Drinking over the lifespan: Focus on older adults. *Alcohol Research, 38*(1), 115–120.

[1264] Bommersbach, T. J., Lapid, M. I., Rummans, T. A., & Morse, R. M. (2015). Geriatric alcohol use disorder: A review for primary care physicians. *Mayo Clinic Proceedings, 90*(5), 659–666.

[1265] Choi, N. G., DiNitto, D. M., Marti, C. N., & Choi, B. Y. (2016). Alcohol, injury, and aging. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 97–115). New York, NY: Springer.

[1266] Addiction Technology Transfer Center Network. (2001). A stomach enzyme deficit may place women at more risk from drinking alcohol. Retrieved from www.eurekalert.org/pub_releases/2001-04/ACER-Ased-1404101.php

[1267] Barry, K. L., & Blow, F. C. (2016). Drinking over the lifespan: Focus on older adults. *Alcohol Research, 38*(1), 115–120.

[1268] Bommersbach, T. J., Lapid, M. I., Rummans, T. A., & Morse, R. M. (2015). Geriatric alcohol use disorder: A review for primary care physicians. *Mayo Clinic Proceedings, 90*(5), 659–666.

[1269] Choi, N. G., DiNitto, D. M., Marti, C. N., & Choi, B. Y. (2016). Alcohol, injury, and aging. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 97–115). New York, NY: Springer.

[1270] Letizia, M., & Reinbolz, M. (2005). Identifying and managing acute alcohol withdrawal in the elderly. *Geriatric Nursing, 26*(3), 176–183.

[1271] Saitz, R. (2013). Brief intervention for unhealthy alcohol use. In R. Saitz (Ed.), *Addressing unhealthy alcohol use in primary care* (pp. 41–48). New York, NY: Springer.

[1272] Epstein, E. E., Fischer-Elber, K., & Al-Otaiba, Z. (2007). Women, aging, and alcohol use disorders. *Journal of Women and Aging, 19*(1–2), 31–48.

[1273] Substance Abuse and Mental Health Services Administration. (2009). *Substance abuse treatment: Addressing the specific needs of women.* Treatment Improvement Protocol (TIP) Series 51. HHS Publication No. (SMA) 15-4426. Retrieved from https://store.samhsa.gov/product/TIP-51-Substance-Abuse-Treatment-Addressing-the-Specific-Needs-of-Women/SMA15-4426

[1274] Alcohol Pharmacology Education Partnership. (n.d.). Gender differences in alcohol metabolism. Retrieved from https://sites.duke.edu/apep/module-1-gender-matters/content/content-gender-differences-in-alcohol-metabolism

[1275] Epstein, E. E., Fischer-Elber, K., & Al-Otaiba, Z. (2007). Women, aging, and alcohol use disorders. *Journal of Women and Aging, 19*(1–2), 31–48.

[1276] Blow, F., & Barry, K. (2002). Use and misuse of alcohol among older women. *Alcohol Research and Health: The Journal of the National Institute on Alcohol Abuse and Alcoholism, 26*(4), 308–315.

[1277] Substance Abuse and Mental Health Services Administration. (2009). *Substance abuse treatment: Addressing the specific needs of women.* Treatment Improvement Protocol (TIP) Series 51. HHS Publication No. (SMA) 15-4426. Retrieved from https://store.samhsa.gov/product/TIP-51-Substance-Abuse-Treatment-Addressing-the-Specific-Needs-of-Women/SMA15-4426

[1278] Olfson, M., King, M., & Schoenbaum, M. (2015). Benzodiazepine use in the United States. *JAMA Psychiatry, 72*(2), 136–142.

[1279] Satre, D. D., Mertens, J. R., & Weisner, C. (2004). Gender differences in treatment outcomes for alcohol dependence among older adults. *Journal of Studies on Alcohol, 65*(5), 638–642.

[1280] Wettlaufer, A. (2018). Can a label help me drink in moderation? A review of the evidence on standard drink labelling. *Substance Use and Misuse, 53*(4), 585–595.

[1281] National Institute on Alcohol Abuse and Alcoholism. (n.d.). What's a "standard" drink? Retrieved June 14, 2019, from www.rethinkingdrinking.niaaa.nih.gov/How-much-is-too-much/What-counts-as-a-drink/Whats-A-Standard-Drink.aspx

[1282] Kuerbis, A., Chernick, R., & Gardner, D. S. (2016). Alcohol use and comorbid psychiatric and subsyndromal disorders among older adults. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 35–53). New York, NY: Springer.

[1283] Satre, D. D. (2015). Alcohol and drug use problems among older adults. *Clinical Psychology: Science and Practice, 22,* 238–254.

[1284] Haighton, C. (2016). Thinking behind alcohol consumption in old age: Psychological and sociological reasons for drinking in old age. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 3–16). New York, NY: Springer.

[1285] Kuerbis, A., Treloar Padovano, H., Shao, S., Houser, J., Muench, F. J., & Morgenstern, J. (2018). Comparing daily drivers of problem drinking among older and younger adults: An electronic daily diary study using smartphones. *Drug and Alcohol Dependence, 183,* 240–246.

[1286] Substance Abuse and Mental Health Services Administration. (2019). *Get connected: Linking older adults with resources on medication, alcohol, and mental health.* HHS. Pub. No. (SMA) 03-3824. Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration. Retrieved from https://store.samhsa.gov/product/Get-Connected-Linking-Older-Adults-with-Resources-on-Medication-Alcohol-and-Mental-Health-2019-Edition/SMA03-3824

[1287] Kelly, S., Olanrewaju, O., Cowan, A., Brayne, C., & Lafortune, L. (2018). Alcohol and older people: A systematic review of barriers, facilitators and context of drinking in older people and implications for intervention design. *PLoS One, 13*(1), e0191189.

[1288] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[1289] Satre, D. D. (2015). Alcohol and drug use problems among older adults. *Clinical Psychology: Science and Practice, 22*, 238–254.

[1290] Chernick, R., & Kuerbis, A. (2016). Social and familial contexts for drinking among older adults. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 149–166). New York, NY: Springer.

[1291] Canham, S. L., & Mauro, P. M. (2016). Self-medication with alcohol: Aging issues. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 201–214). New York, NY: Springer.

[1292] Canham, S. L., & Mauro, P. M. (2016). Self-medication with alcohol: Aging issues. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 201–214). New York, NY: Springer.

[1293] Blow, F. C., Brockmann, L. M., & Barry, K. L. (2004). Role of alcohol in late-life suicide. *Alcoholism, Clinical and Experimental Research, 28*(Suppl. 1), 48S–56S.

[1294] Oslin, D. W., & Zanjani, F. (2016). Treatment of unhealthy alcohol use in older adults. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 181–199). New York, NY: Springer.

[1295] Canham, S. L., & Mauro, P. M. (2016). Self-medication with alcohol: Aging issues. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 201–214). New York, NY: Springer.

[1296] Gilson, K.-M., Bryant, C., & Judd, F. (2017). Understanding older problem drinkers: The role of drinking to cope. *Addictive Behaviors, 64,* 101–106.

[1297] Substance Abuse and Mental Health Services Administration. (2019). *Get connected: Linking older adults with resources on medication, alcohol, and mental health.* HHS. Pub. No. (SMA) 03-3824. Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration. Retrieved from https://store.samhsa.gov/product/Get-Connected-Linking-Older-Adults-with-Resources-on-Medication-Alcohol-and-Mental-Health-2019-Edition/SMA03-3824

[1298] DiBartolo, M. C., & Jarosinski, J. M. (2017). Alcohol use disorder in older adults: Challenges in assessment and treatment. *Issues in Mental Health Nursing, 38*(1), 25–32.

[1299] Gilson, K.-M., Bryant, C., & Judd, F. (2017). Understanding older problem drinkers: The role of drinking to cope. *Addictive Behaviors, 64,* 101–106.

[1300] Substance Abuse and Mental Health Services Administration. (2019). *Get connected: Linking older adults with resources on medication, alcohol, and mental health.* HHS. Pub. No. (SMA) 03-3824. Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration. Retrieved from https://store.samhsa.gov/product/Get-Connected-Linking-Older-Adults-with-Resources-on-Medication-Alcohol-and-Mental-Health-2019-Edition/SMA03-3824

[1301] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[1302] DiBartolo, M. C., & Jarosinski, J. M. (2017). Alcohol use disorder in older adults: Challenges in assessment and treatment. *Issues in Mental Health Nursing, 38*(1), 25–32.

[1303] Gilson, K.-M., Bryant, C., & Judd, F. (2017). Understanding older problem drinkers: The role of drinking to cope. *Addictive Behaviors, 64,* 101–106.

[1304] Gilson, K.-M., Bryant, C., & Judd, F. (2017). Understanding older problem drinkers: The role of drinking to cope. *Addictive Behaviors, 64,* 101–106.

[1305] Substance Abuse and Mental Health Services Administration & Food and Drug Administration. (2004). As you age: A guide to aging, medicines, and alcohol. Retrieved from www.fda.gov/drugs/resources-you/you-agea-guide-aging-medicines-and-alcohol

[1306] Gilson, K.-M., Bryant, C., & Judd, F. (2017). Understanding older problem drinkers: The role of drinking to cope. *Addictive Behaviors, 64,* 101–106.

[1307] Gilson, K.-M., Bryant, C., & Judd, F. (2017). Understanding older problem drinkers: The role of drinking to cope. *Addictive Behaviors, 64,* 101–106.

[1308] Gilson, K.-M., Bryant, C., & Judd, F. (2017). Understanding older problem drinkers: The role of drinking to cope. *Addictive Behaviors, 64,* 101–106.

[1309] Gilson, K.-M., Bryant, C., & Judd, F. (2017). Understanding older problem drinkers: The role of drinking to cope. *Addictive Behaviors, 64,* 101–106.

[1310] Gordon, A. J., Gordon, J. M., & Broyles, L. M. (2013). Medical consequences of unhealthy alcohol. In R. Saitz (Ed.), *Addressing unhealthy alcohol use in primary care* (pp. 107–118). New York, NY: Springer.

[1311] World Health Organization. (2018). Alcohol. Retrieved from www.who.int/news-room/fact-sheets/detail/alcohol

[1312] Barry, K. L., & Blow, F. C. (2016). Drinking over the lifespan: Focus on older adults. *Alcohol Research, 38*(1), 115–120.

[1313] GBD 2016 Collaborators. (2018). Alcohol use and burden for 195 countries and territories, 1990–2016: A systematic analysis for the Global Burden of Disease Study 2016. *Lancet, 392*(10152), 1015–1035.

[1314] Rehm, J., Gmel, G. E., Sr., Gmel, G., Hasan, O. S. M., Imtiaz, S., Popova, S., … Shuper, P. A. (2017). The relationship between different dimensions of alcohol use and the burden of disease—An update. *Addiction, 112,* 968–1001.

[1315] NIH Osteoporosis and Related Bone Disease National Resource Center. (n.d.). What people recovering from alcoholism need to know about osteoporosis. Retrieved from www.bones.nih.gov/health-info/bone/osteoporosis/conditions-behaviors/alcoholism

[1316] Substance Abuse and Mental Health Services Administration. (2019). *Get connected: Linking older adults with resources on medication, alcohol, and mental health.* HHS Publication No. (SMA) 03-3824. Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from https://store.samhsa.gov/product/Get-Connected-Linking-Older-Adults-with-Resources-on-Medication-Alcohol-and-Mental-Health-2019-Edition/SMA03-3824

[1317] Choi, N. G., DiNitto, D. M., Marti, C. N., & Choi, B. Y. (2016). Alcohol, injury, and aging. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 97–115). New York, NY: Springer.

[1318] Rehm, J., Gmel, G. E., Sr., Gmel, G., Hasan, O. S. M., Imtiaz, S., Popova, S., … Shuper, P. A. (2017). The relationship between different dimensions of alcohol use and the burden of disease—An update. *Addiction, 112,* 968–1001.

[1319] National Institute on Aging. (2017). Facts about aging and alcohol. Retrieved from www.nia.nih.gov/health/facts-about-aging-and-alcohol

[1320] National Institute on Alcohol Abuse and Alcoholism. (n.d.). HIV/AIDS. Retrieved from www.niaaa.nih.gov/alcohol-health/special-populations-co-occurring-disorders/hivaids

[1321] AIDSinfo. (n.d.). HIV and older people. Retrieved from https://aidsinfo.nih.gov/understanding-hiv-aids/fact-sheets/25/80/hiv-and-older-people

[1322] Ford, C. L., Godette, D. C., Mulatu, M. S., & Gaines, T. L. (2015). Recent HIV testing prevalence, determinants, and disparities among U.S. older adult respondents to the Behavioral Risk Factor Surveillance System. *Sexually Transmitted Diseases, 42*(8), 405–410.

[1323] Rehm, J., Gmel, G. E., Sr., Gmel, G., Hasan, O. S. M., Imtiaz, S., Popova, S., … Shuper, P. A. (2017). The relationship between different dimensions of alcohol use and the burden of disease—An update. *Addiction, 112,* 968–1001.

[1324] Berkeley Wellness. (2017). Alcohol's benefits: New questions. Retrieved from www.berkeleywellness.com/self-care/preventive-care/article/alcohols-health-benefits-new-questions

[1325] Andréasson, S., Chikritzhs, T., Dangardt, F., Holder, H., Naimi, T., & Stockwell T. (2014). Evidence about health effects of "moderate" alcohol consumption: Reasons for skepticism and public health implications. In *Alcohol and society 2014* (pp. 6–23). Stockholm, Sweden: IOGT-NTO and Swedish Society of Medicine.

[1326] Molina, P. E., Gardner, J. D., Souza-Smith, F. M., & Whitaker, A. M. (2014). Alcohol abuse: Critical pathophysiological processes and contribution to disease burden. *Physiology (Bethesda, Maryland), 29*(3), 203–215.

[1327] Caputo, F., Vignoli, T., Leggio, L., Addolorato, G., Zoli, G., & Bernardi, M. (2012). Alcohol use disorders in the elderly: A brief overview from epidemiology to treatment options. *Experimental Gerontology, 47,* 411–416.

[1328] DiBartolo, M. C., & Jarosinski, J. M. (2017). Alcohol use disorder in older adults: Challenges in assessment and treatment. *Issues in Mental Health Nursing, 38*(1), 25–32.

[1329] Gordon, A. J., Gordon, J. M., & Broyles, L. M. (2013). Medical consequences of unhealthy alcohol. In R. Saitz (Ed.), *Addressing unhealthy alcohol use in primary care* (pp. 107–118). New York, NY: Springer.

[1330] Rehm, J., Gmel, G. E., Sr, Gmel, G., Hasan, O. S. M., Imtiaz, S., Popova, S., … Shuper, P. A. (2017). The relationship between different dimensions of alcohol use and the burden of disease—An update. *Addiction, 112,* 968–1001.

[1331] Savage, C. L., Finnell, D. S., & Choflet, A. (2016). Cancer, alcohol, and aging. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 65–77). New York, NY: Springer.

[1332] Simou, E., Britton, J., & Leonardi-Bee, J. (2018). Alcohol and the risk of pneumonia: A systematic review and meta-analysis. *BMJ Open, 8*(8), 1–10.

[1333] Elmets, C. A., Leonardi, C. L., Davis, D. M. R., Gelfand, J. M., Lichten, J., Mehta, N. N., … Menter, A. (2019). Joint AAD-NPF guidelines of care for the management and treatment of psoriasis with awareness and attention to comorbidities. *Journal of the American Academy of Dermatology, 80,* 1073–1113.

[1334] Li, S., Cho, E., Drucker, A. M., Qureshi, A. A., & Li, W. Q. (2017). Alcohol intake and risk of rosacea in US women. *Journal of the American Academy of Dermatology, 76*(6), 1061–1067.

[1335] Topiwala, A., & Ebmeier, K. P. (2018). Effects of drinking on late-life brain and cognition. *Evidence-Based Mental Health, 21*(1), 12–15.

[1336] Qato, D. M., Manzoor, B. S., & Lee, T. A. (2015). Drug–alcohol interactions in older U.S. adults. *Journal of the American Geriatrics Society, 63*(11), 2324–2331.

[1337] Breslow, R. A., Dong, C., & White, A. (2015). Prevalence of alcohol-interactive prescription medication use among current drinkers: United States, 1999 to 2010. *Alcoholism, Clinical and Experimental Research, 39*(2), 371–379.

[1338] Breslow, R. A., Dong, C., & White, A. (2015). Prevalence of alcohol-interactive prescription medication use among current drinkers: United States, 1999 to 2010. *Alcoholism, Clinical and Experimental Research, 39*(2), 371–379.

[1339] National Institute on Alcohol Abuse and Alcoholism. (2014). Harmful interactions: Mixing alcohol with medicines. Retrieved from www.niaaa.nih.gov/publications/brochures-and-fact-sheets/harmful-interactions-mixing-alcohol-with-medicines

[1340] Meier, P., & Seitz, H. K. (2008). Age, alcohol metabolism and liver disease. *Current Opinion in Clinical Nutrition and Metabolic Care, 11,* 21–26.

[1341] National Institute on Alcohol Abuse and Alcoholism. (2014). Harmful interactions: Mixing alcohol with medicines. Retrieved from www.niaaa.nih.gov/publications/brochures-and-fact-sheets/harmful-interactions-mixing-alcohol-with-medicines

[1342] Slattum, P. W., & Hassan, O. E. (2016). Medications, alcohol, and aging. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 117–129). New York, NY: Springer.

[1343] National Institute on Alcohol Abuse and Alcoholism. (2014). Harmful interactions: Mixing alcohol with medicines. Retrieved from www.niaaa.nih.gov/publications/brochures-and-fact-sheets/harmful-interactions-mixing-alcohol-with-medicines

[1344] Slattum, P. W., & Hassan, O. E. (2016). Medications, alcohol, and aging. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 117–129). New York, NY: Springer.

[1345] Choi, N. G., DiNitto, D. M., Marti, C. N., & Choi, B. Y. (2016). Alcohol, injury, and aging. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 97–115). New York, NY: Springer.

[1346] Drugs.com. (n.d.). Cough syrup DM (dextromethorphan) and alcohol/food interactions. Retrieved from www.drugs.com/food-interactions/dextromethorphan,cough-syrup-dm.html

[1347] Arora, S., Baraona, E., & Lieber, C. S. (2000). Alcohol levels are increased in social drinkers receiving ranitidine. *American Journal of Gastroenterology, 95*(1), 208–213.

[1348] Weaver, M. (2013). Choices for patients and clinicians: Ethics and legal issues. In R. Saitz (Ed.), *Addressing unhealthy alcohol use in primary care* (pp. 195–206). New York, NY: Springer.

[1349] Paquin, A. M., Zimmerman, K., & Rudolph, J. L. (2014) Risk versus risk: A review of benzodiazepine reduction in older adults. *Expert Opinion on Drug Safety, 13*(7), 919–934.

[1350] Choi, N. G., DiNitto, D. M., Marti, C. N., & Choi, B. Y. (2016). Alcohol, injury, and aging. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 97–115). New York, NY: Springer.

[1351] Harrington, A. (2013). Psychiatric comorbidity. In R. Saitz (Ed.), *Addressing unhealthy alcohol use in primary care* (pp. 119–128). New York, NY: Springer.

[1352] Paquin, A. M., Zimmerman, K., & Rudolph, J. L. (2014) Risk versus risk: A review of benzodiazepine reduction in older adults. *Expert Opinion on Drug Safety, 13*(7), 919–934.

[1353] Gould, R. L., Coulson, M. C., Patel, N., Highton-Williamson, E., & Howard, R. J. (2014). Interventions for reducing benzodiazepine use in older people: Meta-analysis of randomised controlled trials. *British Journal of Psychiatry, 204*(2), 98–107.

[1354] Choi, N. G., DiNitto, D. M., Marti, C. N., & Choi, B. Y. (2016). Alcohol, injury, and aging. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 97–115). New York, NY: Springer.

[1355] Gudin, J. A., Mogali, S., Jones, J. D., & Comer, S. D. (2013). Risks, management, and monitoring of combination opioid, benzodiazepines, and/or alcohol use. *Postgraduate Medicine, 125*(4), 115–130.

[1356] Gunderson, E. W., & Alford, D. P. (2013). Managing pain in the context of unhealthy alcohol use. In R. Saitz (Ed.), *Addressing unhealthy alcohol use in primary care* (pp. 93–105). New York, NY: Springer.

[1357] Taheri, A., Dahri, K., Chan, P., Shaw, M., Aulakh, A., & Tashakkor, A. (2014). Evaluation of a symptom-triggered protocol approach to the management of alcohol withdrawal syndrome in older adults. *Journal of the American Geriatrics Society, 62*(8), 1551–1555.

[1358] Bommersbach, T. J., Lapid, M. I., Rummans, T. A., & Morse, R. M. (2015). Geriatric alcohol use disorder: A review for primary care physicians. *Mayo Clinic Proceedings, 90*(5), 659–666.

[1359] Long, D., Long, B., & Koyfman, A. (2017). The emergency medicine treatment of severe alcohol withdrawal. *American Journal of Emergency Medicine, 35,* 1005–1011.

[1360] Blondell, R. D., & Azadfard, M. (2013). Hospital management. In R. Saitz (Ed.), *Addressing unhealthy alcohol use in primary care* (pp. 207–220). New York, NY: Springer.

[1361] Blondell, R. D., & Azadfard, M. (2013). Hospital management. In R. Saitz (Ed.), *Addressing unhealthy alcohol use in primary care* (pp. 207–220). New York, NY: Springer.

[1362] Dixit, D., Endicott, J., Burry, L., Ramos, L., Yeung, S. Y., Devabhakthuni, S., … Bulloch, M. N. (2016). Management of acute alcohol withdrawal syndrome in critically ill patients. *Pharmacotherapy, 36*(7), 797–822.

[1363] Oslin, D. W., & Zanjani, F. (2016). Treatment of unhealthy alcohol use in older adults. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 181–199). New York, NY: Springer.

[1364] Bommersbach, T. J., Lapid, M. I., Rummans, T. A., & Morse, R. M. (2015). Geriatric alcohol use disorder: A review for primary care physicians. *Mayo Clinic Proceedings, 90*(5), 659–666.

[1365] Eberly, M. E., Lockwood, A. G., Lockwood, S., & Davis, K. W. (2016). Outcomes after implementation of an alcohol withdrawal protocol at a single institution. *Hospital Pharmacy, 51*(9), 752–758.

[1366] Letizia, M., & Reinbolz, M. (2005). Identifying and managing acute alcohol withdrawal in the elderly. *Geriatric Nursing, 26*(3), 176–183.

[1367] Blondell, R. D., & Azadfard, M. (2013). Hospital management. In R. Saitz (Ed.), *Addressing unhealthy alcohol use in primary care* (pp. 207–220). New York, NY: Springer.

[1368] National Institute on Alcohol Abuse and Alcoholism. (n.d.). Planning for change. Retrieved June 1, 2019, from www.rethinkingdrinking.niaaa.nih.gov/Thinking-about-a-change/Its-up-to-you/Planning-For-Change.aspx

[1369] Hunter, C. L., Goodie, J. L., Oordt, M. S., & Dobmeyer, A. C. (2017). Alcohol and prescription medication misuse. In C. L. Hunt, J. L. Goodie, M. S. Oordt, & A. C. Dobmeyer (Eds.), *Integrated behavioral health in primary care: Step-by-step guidance for assessment and intervention* (pp. 175–186). Washington, DC: American Psychological Association.

[1370] Miller, W. R., & Muñoz, R. F. (2013). *Controlling your drinking: Tools to make moderation work for you* (2nd ed.). New York, NY: Guildford Press.

[1371] National Institute on Alcohol Abuse and Alcoholism. (2016). *Rethinking drinking.* NIH Publication No. 15-3770. Rockville, MD: National Institute on Alcohol Abuse and Alcoholism.

[1372] National Institute on Aging. (n.d.). Getting help for alcohol problems. Retrieved from www.nia.nih.gov/health/getting-help-alcohol-problems

[1373] National Institute on Alcohol Abuse and Alcoholism. (n.d.). Drinking tracker cards. Retrieved June 1, 2019, from www.rethinkingdrinking.niaaa.nih.gov/tools/Interactive-worksheets-and-more/Track-what-you-drink/Drinking-Tracker-Cards.aspx

[1374] National Institute on Aging. (n.d.). Getting help for alcohol problems. Retrieved from www.nia.nih.gov/health/getting-help-alcohol-problems

[1375] Alcoholics Anonymous. (2016). *The Twelve Steps of Alcoholics Anonymous.* Retrieved from www.aa.org/assets/en_US/smf-121_en.pdf

[1376] Alcoholics Anonymous. (2017). Serving all alcoholics: Making the A.A. message accessible. Retrieved from www.aa.org/assets/en_US/f-107_servingallalcoholics.pdf

[1377] Addiction Recovery Guide. (n.d.). Mobile apps for addiction. Retrieved from www.addictionrecoveryguide.org/resources/mobile_apps

[1378] Jewell, T. (2020). The best alcohol addiction recovery apps of 2020. Retrieved from www.healthline.com/health/addiction/top-alcoholism-iphone-android-apps#nomo

[1379] Jewell, T. (2020). The best alcohol addiction recovery apps of 2020. Retrieved from www.healthline.com/health/addiction/top-alcoholism-iphone-android-apps#nomo

[1380] Castle, N., Smith, M. L., & Wolf, D. G. (2016). Long-term care and alcohol use. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 233–246). New York, NY: Springer.

[1381] Han, B. H., & Moore, A. A. (2018). Prevention and screening of unhealthy substance use by older adults. *Clinics in Geriatric Medicine, 34,* 117–129.

[1382] Substance Abuse and Mental Health Services Administration. (2019). *Get connected: Linking older adults with resources on medication, alcohol, and mental health.* HHS. Pub. No. (SMA) 03-3824. Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration. Retrieved from https://store.samhsa.gov/product/Get-Connected-Linking-Older-Adults-with-Resources-on-Medication-Alcohol-and-Mental-Health-2019-Edition/SMA03-3824

[1383] Moore, A. A., Kuerbis, A., Sacco, P., Chen, G. I., & Garcia, M. B. (2016). Screening and assessment of unhealthy alcohol use in older adults. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 169–180). New York, NY: Springer.

[1384] Barry, K. L., & Blow, F. C. (2010). Screening, assessing and intervening for alcohol and medication misuse in older adults. In P. A. Lichtenberg (Ed.), *Handbook of assessment in clinical gerontology* (pp. 307–330). Burlington, MA: Elsevier.

[1385] National Institute on Alcohol Abuse and Alcoholism. (n.d.). Why do different people need different options? Retrieved from https://alcoholtreatment.niaaa.nih.gov/what-to-know/different-people-different-options

[1386] Substance Abuse and Mental Health Services Administration, & National Institute on Alcohol Abuse and Alcoholism. (2015). *Medication for the treatment of alcohol use disorder: A brief guide.* HHS Publication No. (SMA) 15-4907. Retrieved from https://store.samhsa.gov/product/Medication-for-the-Treatment-of-Alcohol-Use-Disorder-A-Brief-Guide/SMA15-4907

[1387] Moore, A. A., Kuerbis, A., Sacco, P., Chen, G. I., & Garcia, M. B. (2016). Screening and assessment of unhealthy alcohol use in older adults. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 169–180). New York, NY: Springer.

[1388] Substance Abuse and Mental Health Services Administration & National Institute on Alcohol Abuse and Alcoholism. (2015). *Medication for the treatment of alcohol use disorder: A brief guide.* HHS Publication No. (SMA) 15-4907. Retrieved from https://store.samhsa.gov/product/Medication-for-the-Treatment-of-Alcohol-Use-Disorder-A-Brief-Guide/SMA15-4907

[1389] Substance Abuse and Mental Health Services Administration & National Institute on Alcohol Abuse and Alcoholism. (2015). *Medication for the treatment of alcohol use disorder: A brief guide.* HHS Publication No. (SMA) 15-4907. Retrieved from https://store.samhsa.gov/product/Medication-for-the-Treatment-of-Alcohol-Use-Disorder-A-Brief-Guide/SMA15-4907

[1390] Substance Abuse and Mental Health Services Administration & National Institute on Alcohol Abuse and Alcoholism. (2015). *Medication for the treatment of alcohol use disorder: A brief guide.* HHS Publication No. (SMA) 15-4907. Retrieved from https://store.samhsa.gov/product/Medication-for-the-Treatment-of-Alcohol-Use-Disorder-A-Brief-Guide/SMA15-4907

[1391] Knopf, A. (2011, May 15). Some experts charge centers that avoid drug treatments with shunning science and ethics. *Addiction Professional, 9*(3).

[1392] National Institute on Alcohol Abuse and Alcoholism. (2014). Treatment for alcohol problems: Finding and getting help. Retrieved from https://pubs.niaaa.nih.gov/publications/Treatment/treatment.htm#chapter04

[1393] Moore, A. A., Kuerbis, A., Sacco, P., Chen, G. I., & Garcia, Maristela, B. (2016). Screening and assessment of unhealthy alcohol use in older adults. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 169–180). New York, NY: Springer.

[1394] Moore, A. A., Kuerbis, A., Sacco, P., Chen, G. I., & Garcia, M. B. (2016). Screening and assessment of unhealthy alcohol use in older adults. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 169–180). New York, NY: Springer.

[1395] Oslin, D. W., & Zanjani, F. (2016). Treatment of unhealthy alcohol use in older adults. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 181–200). New York, NY: Springer.

[1396] Dixit, D., Endicott, J., Burry, L., Ramos, L., Yeung, S. Y., Devabhakthuni, S., … Bulloch, M. N. (2016). Management of acute alcohol withdrawal syndrome in critically ill patients. *Pharmacotherapy, 36*(7), 797–822.

[1397] Bommersbach, T. J., Lapid, M. I., Rummans, T. A., & Morse, R. M. (2015). Geriatric alcohol use disorder: A review for primary care physicians. *Mayo Clinic Proceedings, 90*(5), 659–666.

[1398] McCarty, D., Braude, L., Lyman, D. R., Dougherty, R. H., Daniels, A. S., Ghose, S. S., & Delphin-Rittmon, M. E. (2014). Substance abuse intensive outpatient programs: Assessing the evidence. *Psychiatric Services (Washington, D.C.), 65*(6), 718–726.

[1399] Rastegar, D. A. (2013). Making effective referrals to specialty care. In R. Saitz (Ed.), *Addressing unhealthy alcohol use in primary care* (pp. 63–72). New York, NY: Springer.

[1400] McCarty, D., Braude, L., Lyman, D. R., Dougherty, R. H., Daniels, A. S., Ghose, S. S., & Delphin-Rittmon, M. E. (2014). Substance abuse intensive outpatient programs: Assessing the evidence. *Psychiatric Services (Washington, D.C.), 65*(6), 718–726.

[1401] McCarty, D., Braude, L., Lyman, D. R., Dougherty, R. H., Daniels, A. S., Ghose, S. S., & Delphin-Rittmon, M. E. (2014). Substance abuse intensive outpatient programs: Assessing the evidence. *Psychiatric Services (Washington, D.C.), 65*(6), 718–726.

[1402] Rastegar, D. A. (2013). Making effective referrals to specialty care. In R. Saitz (Ed.), *Addressing unhealthy alcohol use in primary care* (pp. 63–72). New York, NY: Springer.

[1403] Mee-Lee, D., Shulman, G. D., Fishman, M. J., Gastfriend, D. R., & Miller, M. M. (Eds.). (2013). *The ASAM Criteria: Treatment criteria for addictive, substance-related, and co-occurring conditions* (3rd ed.). Carson City, NV: The Change Companies.

[1404] Satre, D. D., Mertens, J., Areán, P. A., & Weisner, C. (2003). Contrasting outcomes of older versus middle-aged and younger adult chemical dependency patients in a managed care program. *Journal of Studies on Alcohol, 64*(4), 520–530.

[1405] Kuerbis, A., & Sacco, P. (2013). A review of existing treatments for substance abuse among the elderly and recommendations for future directions. *Substance Abuse: Research and Treatment, 7,* 13–37.

[1406] MedLine Plus. (2017). Alcohol use disorder (AUD) treatment. Retrieved from https://medlineplus.gov/alcoholusedisorderaudtreatment.html

[1407] Oslin, D. W., & Zanjani, F. (2016). Treatment of unhealthy alcohol use in older adults. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 181–199). New York, NY: Springer.

[1408] Petkus, A. J., & Wetherell, J. L. (2013). Acceptance and commitment therapy with older adults: Rationale and considerations. *Cognitive and Behavioral Practice, 20, 47–56.*

[1409] O'Farrell, T. J., & Clements, K. (2012). Review of outcome research on marital and family therapy in treatment for alcoholism. *Journal of Marital and Family Therapy, 38*(1), 122–144.

[1410] McHugh, R. K., Hearon, B. A., & Otto, M. W. (2010). Cognitive behavioral therapy for substance use disorders. *Psychiatric Clinics of North America, 33*(3), 511–525.

[1411] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[1412] Rastegar, D. A. (2013). Making effective referrals to specialty care. In R. Saitz (Ed.), *Addressing unhealthy alcohol use in primary care* (pp. 63–72). New York, NY: Springer.

[1413] Substance Abuse and Mental Health Services Administration. (2013). *Family therapy can help.* HHS Publication No. (SMA) 13-4784. Retrieved from https://store.samhsa.gov/product/Family-Therapy-Can-Help-For-People-in-Recovery-From-Mental-Illness-or-Addiction/SMA15-4784

[1414] Chawla, N., Collin, S., Bowen, S., Hsu, S., Grow, J., Douglass, A., & Marlatt, G. A. (2010). The Mindfulness-Based Relapse Prevention Adherence and Competence Scale: Development, interrater reliability, and validity. *Psychotherapy Research, 20*(4), 388–397.

[1415] Miller, W. R., & Rollnick, S. (2013). *Motivational interviewing: Helping people change* (3rd ed.). New York, NY: Guildford Press.

[1416] Amodeo, M., & López, L. M. (2013). Making effective referrals to Alcoholics Anonymous and other 12-Step programs. In R. Saitz (Ed.), *Addressing unhealthy alcohol use in primary care* (pp. 73–83). New York, NY: Springer.

[1417] Doyle, T. J., Peter D., Friedmann, P. D., & Zywiak, W. H. (2013). Management of patients with alcohol dependence in recovery: Options for maintenance and anticipating and managing relapse in primary care. In R. Saitz (Ed.), *Addressing unhealthy alcohol use in primary care* (pp. 85–92). New York, NY: Springer.

[1418] National Institute on Alcohol Abuse and Alcoholism. (n.d.). Social support to stop drinking. Retrieved June 1, 2019, from www.rethinkingdrinking.niaaa.nih.gov/Thinking-about-a-change/Support-for-quitting/Social-Support.aspx

[1419] Substance Abuse and Mental Health Services Administration. (2013). *Family therapy can help.* HHS Publication No. (SMA) 13-4784. Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from https://store.samhsa.gov/product/Family-Therapy-Can-Help-For-People-in-Recovery-From-Mental-Illness-or-Addiction/SMA15-4784

[1420] National Institute on Alcohol Abuse and Alcoholism. (n.d.). Tips to try. Retrieved June 14, 2019, from www.rethinkingdrinking.niaaa.nih.gov/Thinking-about-a-change/Strategies-for-cutting-down/Tips-To-Try.aspx

[1421] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[1422] NAADAC, The Association for Addiction Professionals. (2014). Understanding the role of peer recovery coaches in the addiction profession. Retrieved from www.naadac.org/assets/2416/2014-05-01_understanding_role_peer_recovery_coaches_webinarslides.pdf

[1423] National Institute on Aging. (n.d.). Getting help for alcohol problems. Retrieved from www.nia.nih.gov/health/getting-help-alcohol-problems

[1424] Hazelden Betty Ford Foundation. (2015, September 1). How do you talk to older adults who may be addicted? Retrieved from www.hazeldenbettyford.org/articles/how-to-talk-to-an-older-person-who-has-a-problem-with-alcohol-or-medications

[1425] SeniorNavigator. (n.d.). Alcoholism and the older adult. Retrieved from https://seniornavigator.org/article/12411/alcoholism-and-older-adult%20%20

[1426] Substance Abuse and Mental Health Services Administration. (2019). *Get connected: Linking older adults with resources on medication, alcohol, and mental health.* HHS Publication No. (SMA) 03-3824. Retrieved from https://store.samhsa.gov/product/Get-Connected-Linking-Older-Adults-with-Resources-on-Medication-Alcohol-and-Mental-Health-2019-Edition/SMA03-3824

[1427] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[1428] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[1429] National Academies of Sciences, Engineering, and Medicine. (2016). *Families caring for an aging America.* Washington, DC: National Academies Press.

[1430] Hazelden Betty Ford Foundation. (2015, September 1). How do you talk to older adults who may be addicted? Retrieved from www.hazeldenbettyford.org/articles/how-to-talk-to-an-older-person-who-has-a-problem-with-alcohol-or-medications

[1431] Hazelden Betty Ford Foundation. (2019). How to talk about addiction: When a friend has a drinking or drug problem. Retrieved from www.hazeldenbettyford.org/articles/what-can-i-say-to-get-you-to-stop

[1432] MedLine Plus. (2017). Helping a loved one with a drinking problem. Retrieved from https://medlineplus.gov/ency/patientinstructions/000815.htm

[1433] Oslin, D. W., & Zanjani, F. (2016). Treatment of unhealthy alcohol use in older adults. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 181–199). New York, NY: Springer.

[1434] HealthyAging.org (n.d.). Tools & Tips: Caregiver Self Assessment Questionnaire. Retrieved from www.healthinaging.org/tools-and-tips/caregiver-self-assessment-questionnaire

[1435] MedLine Plus. (2017). Helping a loved one with a drinking problem. Retrieved from https://medlineplus.gov/ency/patientinstructions/000815.htm

[1436] Hazelden Betty Ford Foundation. (2019). How to talk about addiction: When a friend has a drinking or drug problem. Retrieved from www.hazeldenbettyford.org/articles/what-can-i-say-to-get-you-to-stop

[1437] Hazelden Betty Ford Foundation. (2019). How to talk about addiction: When a friend has a drinking or drug problem. Retrieved from www.hazeldenbettyford.org/articles/what-can-i-say-to-get-you-to-stop

[1438] Center for Behavioral Health Statistics and Quality. (2020). *Results from the 2019 National Survey on Drug Use and Health: Detailed tables.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.samhsa.gov/data/

[1439] National Institute on Alcohol Abuse and Alcoholism. (n.d.). Drinking levels defined. Retrieved from www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

[1440] Kaiser Permanente. (2019). Alcohol use in older adults. Retrieved from https://wa.kaiserpermanente.org/healthAndWellness/index.jhtml?item=%2Fcommon%2FhealthAndWellness%2FhealthyLiving%2Flifestyle%2Falcohol-seniors.html

[1441] U.S. Department of Health and Human Services & U.S. Department of Agriculture. (2015). *2015–2020 Dietary Guidelines for Americans* (8th ed.). Retrieved from https://health.gov/our-work/food-nutrition/2015-2020-dietary-guidelines

[1442] National Institute on Alcohol Abuse and Alcoholism. (2017). Cocktail content calculator. Retrieved June 14, 2019, from www.rethinkingdrinking.niaaa.nih.gov/Tools/Calculators/cocktail-calculator.aspx

[1443] Substance Abuse and Mental Health Services Administration. (2012). *Older Americans Behavioral Health Issue Brief 2: Alcohol misuse and abuse prevention* (p. 1). Retrieved from www.acl.gov/sites/default/files/programs/2016-11/Issue%20Brief%202%20Alcohol%20Misuse.pdf

[1444] National Institute on Alcohol Abuse and Alcoholism. (n.d.). What's a "standard" drink? Retrieved from www.rethinkingdrinking.niaaa.nih.gov/How-much-is-too-much/What-counts-as-a-drink/Whats-A-Standard-Drink.aspx

[1445] Blow, F. C., et al. (1998). Brief screening for alcohol problems in elderly populations using the Short Michigan Alcoholism Screening Test-Geriatric Version (SMAST-G). Hilton Head Island, SC: Research Society on Alcoholism Annual Scientific Meeting.

[1446] American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

[1447] Moore, A. A., Kuerbis, A., Sacco, P., Chen, G. I., & Garcia, M. B. (2016). Screening and assessment of unhealthy alcohol use in older adults. In A. Kuerbis, A. A. Moore, P. Sacco, & F. Zanjani (Eds.), *Alcohol and aging: Clinical and public health perspectives* (pp. 169–180). New York, NY: Springer.

[1448] Barry, K. L., Blow, F. C., & Oslin, D. W. (2002). Substance abuse in older adults: Review and recommendations for education and practice in medical settings. *Substance Abuse, 23*(3 Suppl.), 105–131.

[1449] Kuerbis, A., Sacco, P., Blazer, D. G., & Moore, A. A. (2014). Substance abuse among older adults. *Clinics in Geriatric Medicine, 30*(3), 629–654.

[1450] Barnes, A. J., Moore, A. A., Xu, H., Ang, A., Tallen, L., Mirkin, M., & Ettner, S. L. (2010). Prevalence and correlates of at-risk drinking among older adults: The Project SHARE study. *Journal of General Internal Medicine, 25*(8), 840–846.

[1451] Aalto, M., Alho, H., Halme, J. T., & Seppä, K. (2011). The Alcohol Use Disorders Identification Test (AUDIT) and its derivatives in screening for heavy drinking among the elderly. *International Journal of Geriatric Psychiatry, 26*(9), 881–885.

[1452] Barbor, T. F., Higgins-Biddle, J. C., Saunders, J. B., & Monteiro, M. G. (2001). *AUDIT: The Alcohol Use Disorders Identification Test: Guidelines for use in primary care* (2nd ed., p. 17). Geneva, Switzerland: World Health Organization.

[1453] Barbor, T. F., Higgins-Biddle, J. C., Saunders, J. B., & Monteiro, M. G. (2001). *AUDIT: The Alcohol Use Disorders Identification Test: Guidelines for use in primary care* (2nd ed., p. 31). Geneva, Switzerland: World Health Organization.

[1454] Aalto, M., Alho, H., Halme, J. T., & Seppă, K. (2011). The Alcohol Use Disorders Identification Test (AUDIT) and its derivatives in screening for heavy drinking among the elderly. *International Journal of Geriatric Psychiatry, 26*(9), 881–885.

[1455] Bush, K., Kivlahan, D. R., McDonell, M. B., Fihn, S. D., & Bradley, K. A. (1998). The AUDIT alcohol consumption questions (AUDIT-C): An effective brief screening test for problem drinking. *Archives of Internal Medicine, 158,* 1789–1795.

[1456] U.S. Department of Veterans Affairs. (n.d.). AUDIT-C Frequently Asked Questions. Retrieved from www.queri.research.va.gov/tools/alcohol-misuse/alcohol-faqs.cfm#top

[1457] Purcell, B. (2003). *Senior Alcohol Misuse Indicator.* Toronto, Canada: Centre for Addiction and Mental Health, University of Toronto.

[1458] Adamson, S. J., Kay-Lambkin, F. J., Baker, A. L., Lewin, T. J., Thornton, L., Kelly, B. J., & Sellman, J. D. (2010). An improved brief measure of cannabis misuse: The Cannabis Use Disorders Identification Test–Revised (CUDIT-R). *Drug and Alcohol Dependence, 110,* 137–143.

[1459] Adamson, S. J., Kay-Lambkin, F. J., Baker, A. L., Lewin, T. J., Thornton, L., Kelly, B. J., & Sellman, J. D. (2010). An improved brief measure of cannabis misuse: The Cannabis Use Disorders Identification Test–Revised (CUDIT-R). *Drug and Alcohol Dependence, 110,* 137–143.

[1460] Brown, R. L., & Rounds, L. A. (1995). Conjoint screening questionnaires for alcohol and other drug abuse: Criterion validity in a primary care practice. *Wisconsin Medical Journal, 94*(3), 135–140.

[1461] Substance Abuse and Mental Health Services Administration. (2011). Screening, brief intervention and referral to treatment (SBIRT) in behavioral healthcare. Retrieved from www.samhsa.gov/sites/default/files/sbirtwhitepaper_0.pdf

[1462] Friedmann, P. D. (2013). Alcohol use in adults. *New England Journal of Medicine, 368*(17), 1655–1656.

[1463] Babor, T. F., & Higgins-Biddle, J. C. (2001). *Brief intervention for hazardous and harmful drinking: A manual for use in primary care.* Retrieved from https://apps.who.int/iris/handle/10665/67210

[1464] Substance Abuse and Mental Health Services Administration. (2017). *A guide to preventing older adult alcohol and psychoactive medication misuse/abuse: Screening and brief interventions* (p. 87). Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from www.ncoa.org/wp-content/uploads/SBIRT-Older-Adult-Manual-Final.pdf

[1465] Vasiliadis, H. M., Chudzinski, V., Gontijo-Guerra, S., & Préville, M. (2015). The 10-item Kessler Psychological Distress Scale (K10) and the 7-item Generalized Anxiety Disorder Scale (GAD-7): Screening instruments for a population of older adults. *Gerontologist, 55*(Suppl. 2), 87.

[1466] Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Löwe, B. A. (2006). Brief measure for assessing generalized anxiety disorder: The GAD-7. *Archives of Internal Medicine, 166*(10), 1092–1097.

[1467] Segal, D. L., June, A., Payne, M., Coolidge, F. L., & Yochim, B. (2010). Development and initial validation of a self-report assessment tool for anxiety among older adults: The Geriatric Anxiety Scale. *Journal of Anxiety Disorders, 24,* 709–714.

[1468] Mueller, A. E., Segal, D. L., Gavett, B., Marty, M. A., Yochim, B., June, A., & Coolidge, F. L. (2015). Geriatric Anxiety Scale: Item response theory analysis, differential item functioning, and creation of a ten-item short form (GAS-10). *International Psychogeriatrics, 27*(7), 1099–1111.

[1469] Segal, D. L., June, A., Payne, M., Coolidge, F. L., & Yochim, B. (2010). Development and initial validation of a self-report assessment tool for anxiety among older adults: The Geriatric Anxiety Scale. *Journal of Anxiety Disorders, 24,* 709–714.

[1470] Meyer, T., Miller, M., Metzger, R., & Borkovec, T. D. (1990). Development and validation of the Penn State Worry Scale. *Behaviour Research and Therapy, 28,* 487–495.

[1471] Therrien, Z., & Hunsley, J. (2012). Assessment of anxiety in older adults: A systematic review of commonly used measures, *Aging and Mental Health, 16*(1), 1–16.

[1472] Brown, E. L., Raue, P. J., & Halpert, K. (2015). Evidence-based practice guideline: Depression detection in older adults with dementia. *Journal of Gerontological Nursing, 41*(11), 15–21.

[1473] Brown, E. L., Raue, P. J., & Halpert, K. (2015). Evidence-based practice guideline: Depression detection in older adults with dementia. *Journal of Gerontological Nursing, 41*(11), 15–21.

[1474] Brown, E. L., Raue, P. J., & Halpert, K. (2015). Evidence-based practice guideline: Depression detection in older adults with dementia. *Journal of Gerontological Nursing, 41*(11), 15–21.

[1475] Yesavage, J. A. (n.d.). Geriatric Depression Scale. Retrieved from https://web.stanford.edu/~yesavage/GDS.html

[1476] Phelan, E., Williams, B., Meeker, K., Bonn, K., Frederick, J., Logerfo, J., & Snowden, M. (2010). A study of the diagnostic accuracy of the PHQ-9 in primary care elderly. *BMC Family Practice, 11,* 63.

[1477] Richardson, T. M., He, H., Podgorski, C., Tu, X., & Conwell, Y. (2010). Screening for depression in aging services clients. *American Journal of Geriatric Psychiatry, 18*(12), 1116–1123.

[1478] Richardson, T. M., He, H., Podgorski, C., Tu, X., & Conwell, Y. (2010). Screening for depression in aging services clients. *American Journal of Geriatric Psychiatry, 18*(12), 1116–1123.

[1479] Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine, 16*(9), 606–613.

[1480] Kroene, K., & Spitzer, R. L. (2002). The PHQ-9: A new depression diagnostic and severity measure. *Psychiatric Annals, 32,* 509–521.

[1481] Richardson, T. M., He, H., Podgorski, C., Tu, X., & Conwell, Y. (2010). Screening for depression in aging services clients. *American Journal of Geriatric Psychiatry, 18*(12), 1116–1123.

[1482] Hudson, S. A., Beckford, L. A., Jackson, S. D., & Philpot, M. P. (2008). Validation of a screening instrument for post-traumatic stress disorder in a clinical sample of older adults. *Aging and Mental Health, 12*(5), 670–673.

[1483] Weathers, F. W., Litz, B. T., Herman, J. A., Huska, J. A., & Keane, T. M. (1993). The PTSD Checklist (PCL): Reliability, validity and diagnostic utility. Paper presented at the 9th Annual Conference of the International Society of Traumatic Stress Studies. San Antonio, Texas.

[1484] Pietrzak, R. H., Van Ness, P. H., Fried, T. R., Galea, S., & Norris, F. (2012). Diagnostic utility and factor structure of the PTSD Checklist in older adults. *International Psychogeriatrics, 24*(10), 1684–1696.

[1485] Yeager, D. E., & Magruder, K. M. (2014). PTSD checklist scoring rules for elderly Veterans Affairs outpatients. *American Journal of Geriatric Psychiatry, 22*(6), 545–550.

[1486] Weathers, F. W., Litz, B. T., Keane, T. M., Palmieri, P. A., Marx, B. P., & Schnurr, P. P. (2013). The PTSD Checklist for DSM-5 (PCL-5). Retrieved from https://www.ptsd.va.gov/professional/assessment/adult-sr/ptsd-checklist.asp

[1487] Prins, A., Bovin, M. J., Smolenski, D. J., Marx, B. P., Kimerling, R., Jenkins-Guarnieri, M. A., ... Tiet, Q. Q. (2016). The Primary Care PTSD Screen for DSM-5 (PC-PTSD-5): Development and evaluation within a veteran primary care sample. *Journal of General Internal Medicine, 31*(10), 1206–1211.

[1488] Prins, A., Bovin, M. J., Kimerling, R., Kaloupek, D. G., Marx, B. P., Pless Kaiser, A., & Schnurr, P. P. (2015). The Primary Care PTSD Screen for DSM-5 (PC-PTSD-5). Retrieved from www.ptsd.va.gov/professional/assessment/screens/pc-ptsd.asp

[1489] Yaffe, M. J., & Tazkarji, B. (2012). Understanding elder abuse in family practice. *Canadian Family Physician, 58*(12), 1336–1340.

[1490] Booker, S. Q., & Herr, K. A. (2016). Assessment and measurement of pain in adults in later life. *Clinics in Geriatric Medicine, 32*(4), 677–692.

[1491] Booker, S. Q., & Herr, K. A. (2016). Assessment and measurement of pain in adults in later life. *Clinics in Geriatric Medicine, 32*(4), 677–692.

[1492] Ware, L. J., Herr, K. A., Booker, S. S., Dotson, K., Key, J., Poindexter, N., … Packard, A. (2015). Psychometric evaluation of the revised Iowa Pain Thermometer (IPT-R) in a sample of diverse cognitively intact and impaired older adults: A pilot study. *Pain Management Nursing, 16*(4), 475–482.

[1493] Booker, S. Q., & Herr, K. A. (2016). Assessment and measurement of pain in adults in later life. *Clinics in Geriatric Medicine, 32*(4), 677–692.

[1494] Katz, S., Ford, A. B., Moskowitz, R. W., Jackson, B. A., & Jaffe, M. W. (1963). Studies of illness in the aged: The Index of ADL; a standardized measure of biological and psychosocial function. *JAMA, 185*(12), 914–919.

[1495] Hartigan, I. (2007). A comparative review of the Katz ADL and the Barthel Index in assessing the activities of daily living of older people. *International Journal of Older People Nursing, 2*(3), 204–212.

[1496] Katz, S., Down, T. D., Cash, H. R., & Grotz, R. C. (1970). Progress in the development of the Index of ADL. *Gerontologist, 10,* 20–30.

[1497] Mahoney, F., & Barthel, D. (1965). Functional evaluation: The Barthel Index. *Maryland State Medical Journal, 14,* 61–65.

[1498] Hartigan, I. (2007). A comparative review of the Katz ADL and the Barthel Index in assessing the activities of daily living of older people. *International Journal of Older People Nursing, 2*(3), 204–212.

[1499] NINDS Common Data Elements. (n.d.). Report Viewer [for Barthel Index]. Retrieved from www.commondataelements.ninds.nih.gov/report-viewer/23804/www.mapi-trust.org

[1500] Pfeffer, R. I., Kurosaki, T. T., Harrah, C. H., Chance, J. M., & Filos, S. (1982). Measurement of functional activities in older adults in the community. *Journal of Gerontology, 37*(3), 323–329.

[1501] Tracy, E., & Whittaker, J. (1990). The Social Network Map: Assessing social support in clinical practice. *Families in Society, 71,* 461–470.

[1502] Tracy, E., & Whittaker, J. (1990). The Social Network Map: Assessing social support in clinical practice. *Families in Society, 71,* 461–470.

[1503] Tracy, E., & Whittaker, J. (1990). The Social Network Map: Assessing social support in clinical practice. *Families in Society, 71,* 461–470.

[1504] National Committee for Quality Assurance. (2016). Goals to care: How to keep the person in "person-centered." Retrieved from www.ncqa.org/Portals/0/Programs/Goals%20to%20Care%20-%20Spotlight%20Report.pdf?ver=2016-02-23-113526-113

[1505] Haight, B. K., and Haight, B. S. (2007). *The handbook of structured life review.* Baltimore, MD: Health Professions Press.

[1506] Smith, M., Robinson, L., & Segal, J. (2019). Coping with grief and loss: Understanding the grieving process and learning to heal. Retrieved from https://staging.helpguide.org/articles/grief/coping-with-grief-and-loss.htm

[1507] National Institute on Alcohol Abuse and Alcoholism. (n.d.). Drinking tracker cards. Retrieved June 14, 2019, from www.rethinkingdrinking.niaaa.nih.gov/tools/Interactive-worksheets-and-more/Track-what-you-drink/Drinking-Tracker-Cards.aspx

[1508] Hunter, C. L., Goodie, J. L., Oordt, M. S., & Dobmeyer, A. C. (2017). Alcohol and prescription medication misuse. In C. L. Hunt, J. L. Goodie, M. S. Oordt, & A. C. Dobmeyer (Eds.), *Integrated behavioral health in primary care: Step-by-step guidance for assessment and intervention* (pp. 175–186). Washington, DC: American Psychological Association.

[1509] National Institute on Alcohol Abuse and Alcoholism. (n.d.). Planning for change. Retrieved June 14, 2019, from www.rethinkingdrinking.niaaa.nih.gov/Thinking-about-a-change/Its-up-to-you/Planning-For-Change.aspx

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