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***COUNSELING APPROACHES TO
PROMOTE RECOVERY FROM
PROBLEMATIC SUBSTANCE USE AND
RELATED ISSUES – MODULE 1***

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COUNSELING APPROACHES TO PROMOTE RECOVERY FROM PROBLEMATIC SUBSTANCE USE AND RELATED ISSUES – MODULE 1

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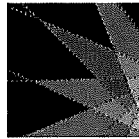
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COUNSELING APPROACHES TO PROMOTE RECOVERY FROM PROBLEMATIC SUBSTANCE USE AND RELATED ISSUES – MODULE 1

In Module 1 readers will learn that:

- Recovery from problematic substance use is a process of change that may or may not have abstinence as a goal. Recovery has many pathways.
- The concept of problematic substance use has evolved from misunderstanding it as a moral failure, to thinking of it as a disease, to, increasingly, applying a biopsychosocial model that considers an individual's lived context.
- The service landscape and the workforce for addressing problematic substance use are changing, as are the entry points for treatment of problematic use.
- Peer support services have been found to support individuals with problematic substance use in initiating, strengthening, and sustaining recovery.
- Any recurrence of use may be preceded by warning signs; counselors should be aware of these signs and be prepared to adjust the support they provide.
- Individuals with problematic substance use should have access to recovery-oriented systems of care (ROSCs), in which providers of treatment, recovery support, and other services take a long-term, coordinated, and holistic approach to addressing individuals' substance use– related problems.
- Recovery-oriented counseling for problematic substance use can take place in a wide variety of settings, including specialty SUD treatment settings.



Chapter 1—Introduction to Recovery From Problematic Substance Use

KEY MESSAGES

- Recovery-oriented counseling can occur in a wide variety of settings, not just in specialized substance use disorder (SUD) treatment settings.
- The conceptualization of problematic substance use has evolved from misunderstanding it as a moral failure, to thinking of it as a disease, to, increasingly, applying a biopsychosocial model that takes into account an individual's lived context.
- In a related shift, the SUD treatment field's traditional approach to problematic substance use—emphasizing acute, episodic, clinician-driven, siloed treatment—is beginning to give way to an approach that emphasizes longer term, person-driven, holistic, integrated recovery-oriented care.
- Recovery from problematic substance use is a process of change that may or may not include total abstinence as a goal. eRecovery has many pathways.
- Recurrence of substance use after a period of resolved problematic use does not mean that recovery has failed. It may mean that treatment or recovery approaches, or both, need adjusting.
- Recovery benefits not just individuals with substance use-related problems, but also their friends and family members, their communities and employers, and society.
- Ideally, people with problematic substance use have access to recovery-oriented systems of care, in which providers of treatment, recovery support, and other services take a long-term, coordinated, and holistic approach to addressing individuals' substance use-related problems.
- The relatively new field of recovery research has the neuroscience of recovery, nonabstinence approaches, the behavioral economics of recovery, and the role of recovery support services among its priorities.

Recovery from substance use-related problems involves a highly individualized journey toward wellness, satisfying relationships, engagement in community, and a sense of meaning and purpose. Despite setbacks that many face along the way, people can and do recover. This concept of recovery, which research and practice increasingly support, differs significantly

from one that sees recovery only in terms of total abstinence and remission of symptoms.

Providing recovery-oriented counseling means, in the most basic sense:

- Identifying and building on the strengths of a client in or seeking recovery.

- Letting the client's preferred recovery goals and pathway shape counseling work on recovery.
- Focusing more on increasing adaptive and healthy behaviors.
- Taking a supportive approach to addressing recurrence of use, should it occur.
- Connecting the client to various recovery support services and other forms of assistance and activities that can strengthen their recovery and improve their well-being and quality of life for the long term.

All these topics and more are described in depth in this Substance Abuse and Mental Health Services Administration (SAMHSA) Treatment Improvement Protocol (TIP). As background, this chapter looks briefly at the origins and treatment of problematic substance use and introduces recovery concepts and supports.

This TIP also applies to clients with problematic substance use who don't engage in specialized substance use disorder (SUD) treatment at all, but instead enter recovery through^{19,20}:

- Participating in mutual-help organizations.
- Working with peer specialists or other nonclinical recovery professionals.
- Becoming involved in recovery-oriented activities or organizations.
- Receiving mental health services.
- Participating in harm reduction services.
- Receiving nonspecialty substance use treatment at medical settings like primary care practices.
- Becoming involved in religious or spiritual activities or organizations.
- Resolving the problematic use on their own (called unassisted or natural recovery).

Individuals may use one or more of these approaches to recovery.

What Is Recovery?

This TIP follows SAMHSA in defining recovery as "a process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential."²¹ SAMHSA has set out four dimensions that support a life in recovery²²:

- **Health.** Overcoming or managing one's disease(s) or symptoms and making informed, healthy choices that support physical and emotional well-being
- **Home.** A stable and safe place to live
- **Purpose.** Meaningful daily activities and the independence, income, and resources to participate in society
- **Community.** Relationships and social networks that provide support, friendship, love, and hope



In addition to the definition and the four dimensions of recovery, SAMHSA has published 10 guiding principles that convey the essential characteristics of recovery (Exhibit 1.1). Both SAMHSA's definition and its guiding principles evolved out of a highly consultative process involving a wide variety of people in recovery and other stakeholders.²³



EXHIBIT 1.1. Principles of Recovery

Guiding principles of recovery for people with problematic substance use were first articulated on a national level by a diverse panel of stakeholders—including individuals in recovery, family members, representatives of mutual-help organizations, treatment providers, and government officials—during the 2005 National Summit on Recovery convened by SAMHSA.²⁴ Another meeting of stakeholders in 2010, plus a yearlong national dialog, both held by SAMHSA, further developed the principles of recovery: this time from a combined mental health and substance use perspective.²⁵

The resulting principles, listed below, underscore the importance of understanding recovery from the individual's point of view and incorporating that viewpoint into the delivery of behavioral health services, including counseling.

Principles of Recovery

- Recovery emerges from hope.
- Recovery is person driven.
- Recovery occurs via many pathways.
- Recovery is holistic.
- Recovery is supported by peers and allies.
- Recovery is supported through relationships and social networks.
- Recovery is culturally based and influenced.
- Recovery is supported by addressing trauma.
- Recovery involves individual, family, and community strengths and responsibility.
- Recovery is based on respect.

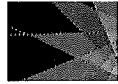
A description of each principle can be found at <https://store.samhsa.gov/product/SAMHSA-s-Working-Definition-of-Recovery/PEP12-RECDEF>.

Numerous surveys of individuals in recovery have added to the understanding of the meaning and experience of recovery. The answers reinforce the idea embedded in the SAMHSA definition that to many people, recovery encompasses more than overcoming problematic substance use itself and its symptoms. For example, the 2014 “What Is Recovery” study found that of 47 elements of recovery presented to people in recovery, 3 of the 6 elements most frequently chosen as definitely belonging in their personal definition of recovery were²⁶:

- A process of growth and development.
- Reacting to life’s ups and downs in a more balanced way than I used to.
- Taking responsibility for the things I can change.

A substantial majority of respondents also saw “living a life that contributes to society, to your family, or to your betterment” and “giving back” as part of how they defined recovery.

At the same time, counselors should be sensitive to the fact that not every person who has overcome problematic substance use thinks of themselves as being in recovery. A 2018 nationally representative cross-sectional survey of people who reported having resolved a substance use problem found that 39.5 percent never identified as being in recovery and 15.4 percent considered themselves no longer in recovery.²⁷ Compared with those respondents who considered themselves in recovery, these respondents were less likely to have a history of formal SUD treatment or mutual-help participation or a substance use or mental disorder diagnosis.



Common reasons respondents gave for never or no longer identifying as being in recovery included that:

- The substance use problem was no longer an issue.
- The problem had been mild.
- They had quit without any or much assistance.
- They continued to use substances in a nonproblematic way.

The study authors suggested that people with past problematic use who don't consider themselves in recovery might respond better to terms like "problem resolution" in clinical situations.²⁸

Information about recovery goals and pathways appears later in this chapter. Chapter 2 discusses the important concept of recovery capital, briefly defined as the internal and external resources available to establish and maintain an individual's recovery.

Settings for Recovery-Oriented Counseling

Recovery-oriented counseling for problematic substance use can take place in a wide variety of settings, including in specialty SUD treatment settings. Given the prevalence of problematic use in the general population, and especially among people receiving mental health services, counselors outside of specialty SUD treatment settings likely have clients at risk for or with past or active problematic use who would benefit from recovery-oriented counseling.²⁹

The list for each setting category below is not exhaustive.

Specialty SUD treatment settings³⁰:

- Outpatient treatment programs
- Intensive outpatient programs

- Partial hospitalization programs
- Residential treatment programs
- Inpatient hospital programs
- Opioid treatment programs
- Office-based opioid treatment

Recovery settings (the "Key Terms" in the Executive Summary and the "Recovery Support Services" subsection in this chapter describe several of these settings):

- Recovery housing
- Collegiate recovery programs
- Recovery community organizations (RCOs)
- Recovery community centers (RCCs)

Mental health service settings³¹:

- Outpatient mental health facilities
- Community mental health centers
- General hospitals with a separate psychiatric unit
- Hospitals with psychiatric consultation services
- Psychiatric hospitals
- Residential treatment centers
- Private practices

Medical settings:

- Primary care practices
- Hospital emergency departments (EDs), regular inpatient units, intensive care units, and transplant units
- Skilled nursing facilities
- Obstetrics and gynecology practices
- Infectious disease clinics

Harm reduction settings:

- Syringe services programs
- Opioid education and naloxone distribution program sites
- Street-based counseling

Educational settings:

- Schools
- Alternative education settings³²
- Colleges
- Graduate schools

Criminal justice–related settings³³:

- Treatment courts
- Probation and parole agencies
- Prisons and jails

Social services settings³⁴:

- Child welfare agencies
- Youth programs
- Shelters

Rehabilitation settings³⁵:

- Private rehabilitation agencies
- Public rehabilitation agencies
- Vocational rehabilitation agencies

Scope of Practice for Providing Counseling

A scope of practice (SOP) sets out the services and activities that a state or territory permits a licensed or certified professional to perform—including, for behavioral health service professionals, diagnosis, assessment, and treatment. SOPs for counselors vary widely by profession and state.^{36,37}

A particular license or certification may limit a counselor's ability to provide substance use–related counseling to any given client and obtain reimbursement for any such counseling. One place to start looking into reimbursement is the state public health department. Links are at <https://www.cdc.gov/publichealthgateway/healthdirectories/healthdepartments.html>. A counselor is responsible for determining (in conjunction

with their clinical supervisor, if applicable) the exact nature and scope of the recovery-oriented counseling services that they may provide in accordance with state laws, their profession's ethical requirements for competence, and their employer's policies and procedures.

PEER SPECIALISTS SUPPORTING RECOVERY FROM PROBLEMATIC SUBSTANCE USE

Peer specialists are an important audience for this TIP, but they have different roles, training, perspectives, and qualifications than counselors. Unlike counselors, peer specialists don't perform clinical work. They don't diagnose, assess, or treat behavioral health conditions, and they don't use clinical language. Instead, peer specialists draw on their lived experience with recovery, plus special training, to provide nondirective recovery support to individuals with active or past problematic use. This recovery support can take many forms and can occur at any point in the recovery process. Typical peer specialist activities range from engaging in street outreach, to providing opioid education and naloxone distribution, to leading life skills–building groups at SUD treatment programs, to checking in with people in long-term recovery.^{38,39}

More information on the peer workforce is in the "Increasing Use of PSS" section later in this chapter. Information on how peer work can complement and reinforce counseling is in the "Linkages to Peer- and Community-Based Support Services" section in Chapter 3. (Counselors may also work with mental health peer specialists, but this TIP doesn't cover that segment of the peer workforce.) SAMHSA's TIP 64, *Incorporating Peer Support Into Substance Use Disorder Treatment Services* (<https://store.samhsa.gov/product/tip-64-incorporating-peer-support-substance-use-disorder-treatment-services/pep23-02-01-001>) also contains useful information.



Problematic Substance Use: Background and Evolving Explanations and Services for It

The prevalence of problematic substance use remains a major public health and social concern in the United States. SAMHSA's most recent National Survey on Drug Use and Health (NSDUH) found that in 2021, 46.3 million people had an SUD in the past year.⁴⁰ Although alcohol use disorder (AUD) was the most common SUD, much of the concern about problematic substance use continues to focus on the opioid epidemic. An estimated 5.6 million people had past-year opioid use disorder (OUD) in 2021.⁴¹

The opioid epidemic also continues to drive increases in drug overdose deaths. Of the estimated 107,622 drug overdose deaths that occurred in the United States in 2021, an estimated 80,816 involved opioids. The total number of drug overdose deaths represents a nearly 15-percent increase from 2020, which saw an estimated 93,655 drug overdose deaths, of which 70,029 were from opioids.⁴²

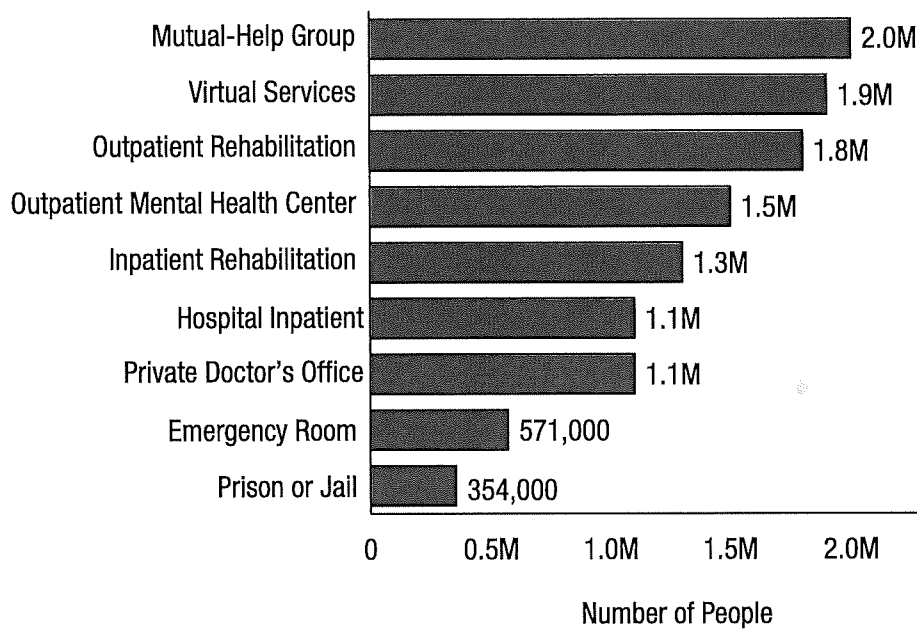
The number of overdose deaths from the stimulants cocaine and methamphetamine also increased in 2021 compared with 2020,⁴³ part of an overall pattern of rising stimulant-involved overdose deaths over the past 20 years.⁴⁴ Co-occurring use of stimulants and opioids is believed to be a major driver of this increase in stimulant-involved overdose mortality.⁴⁵ Some of this co-occurring use is intentional—for example, to balance the effects of the drugs—but some happens unintentionally, such as through the consumption of a stimulant adulterated with fentanyl.⁴⁶

The disturbing numbers on current SUDs and drug overdose deaths need to be set against the encouraging statistics on recovery. Using 2018 NSDUH data, a 2020 study on recovery status found that of the 11.1 percent of U.S. adults who reported having ever had a substance use problem, 74.8 percent (or approximately 20.6 million adults) also reported being in recovery.⁴⁷ And a 2019 cross-sectional study looking at the number of serious quit attempts needed to resolve a significant substance use problem found that the median was 2—a surprisingly low number, as the authors noted (although they further noted that certain subgroups of people made substantially more attempts).⁴⁸

Selected Treatment Statistics

SAMHSA's National Substance Use and Mental Health Services Survey for 2021 found that 18,615 facilities provided substance use treatment.⁴⁹ (This figure does not capture some of the settings where people receive substance use treatment, such as prisons, jails, and certain solo practices.)

SAMHSA's 2021 NSDUH looked at the **types** of locations where people received SUD treatment (Exhibit 1.2). The survey results don't indicate effectiveness of treatment but do show which types of treatment are most frequently used. Outpatient treatment predominates. (Note that the exhibit includes participation in mutual-help groups as substance use treatment, which this TIP does not.)

EXHIBIT 1.2. Locations for Substance Use Treatment in 2021**Where SUD Treatment in the Past Year Was Received:
Among People Age 12 or Older; 2021**

Note: Locations where people received substance use treatment are not mutually exclusive because respondents could report that they received treatment in more than one location in the past year.

Source: Adapted from material in the public domain.⁵⁰

Note: NSDUH includes mutual-help participation as SUD treatment; this TIP does not.

TWO COMMON LEVEL-OF-CARE FRAMEWORKS

Numerous frameworks exist for assessing the level of care (LOC) appropriate for someone with or at risk for problematic substance use. *The ASAM Criteria*® and the Level of Care Utilization System (LOCUS) offer two of the most commonly used frameworks.

***The ASAM Criteria*®.** The American Society of Addiction Medicine (ASAM) framework for clinicians provides a multidimensional assessment to determine the most suitable SUD treatment LOC. The assessment has six dimensions⁵¹:

- Acute intoxication and/or withdrawal potential
- Biomedical conditions and complications
- Emotional, behavioral, and cognitive conditions and complications
- Readiness to change
- Relapse, continued use, or continued problem potential
- Recovering/living environment

The ASAM Criteria's LOCs range from Level .5, Early Intervention, to Level 4, Medically Managed Intensive Inpatient Services.⁵² *The ASAM Criteria*® Assessment Interview Guide is freely available on the ASAM website at <https://www.asam.org/asam-criteria/criteria-intake-assessment-form>. A diagram of the ASAM LOCs and more information on them can be found at <https://attcnetwork.org/centers/attc-network-coordinating-office/attc-messenger-using-asam-criteriar-modernize-and-maximize>.

Note: *The ASAM Criteria*® is proprietary. (The fourth edition of *The ASAM Criteria*® was under development at the time of this TIP's publication.)

LOCUS. Developed by the American Association for Community Psychiatry, the LOCUS assessment for treatment of SUD or mental illness focuses on six dimensions⁵³:

- Risk of harm
- Functional status
- Medical, addictive, and psychiatric comorbidity
- Recovery environment (stress and support in the environment)
- Treatment and recovery history
- Engagement and recovery status

A score is generated to identify an individual's needs and an LOC recommendation.⁵⁴ The tool was designed for collaborative use by clinicians, service users, and others.⁵⁵

The LOCUS LOC framework has seven levels ranging from Level 0, Basic Community-Based Crisis and Prevention Services, to Level 6, Medically Managed Residential Services. The LOCUS includes a recovery-focused LOC: Level 1, Recovery Maintenance and Health Management. More information on the LOCUS can be found at <https://www.communitypsychiatry.org/keystone-programs/locus>.

Note: LOCUS is proprietary.

Selected Recovery Support and Harm Reduction Statistics

Many people with SUDs or other problematic substance use achieve recovery using other avenues alone—or in addition to—formal treatment, or use harm reduction techniques to lessen the consequences of problematic use.

Selected Recovery Support Statistics

A 2017 study on recovery prevalence and pathways found that two of the most used pathways by people in recovery involved mutual-help organizations, such as Alcoholics Anonymous® (45.1 percent of respondents), and recovery support entities, such as recovery housing and RCOs (21.8 percent of respondents).⁵⁶

A 2021 study provided data on the recovery support services most requested at intake by participants in 20 RCOs across the United States. The most frequently requested services were direct peer support services (PSS; 79.0 percent of all participants), mutual-help meetings (51.1 percent), resource referral (49.8 percent), prosocial events (36.2 percent), and harm reduction services (24.4 percent). (RCO participants could request more than one type of service at intake.⁵⁷)

Selected Harm Reduction Statistics

A key statistic on harm reduction techniques is the number of syringe services programs (SSPs) in the country—now around 500.⁵⁸ These programs “can provide a range of services, including access to and disposal of sterile syringes and injection equipment, vaccination, testing, ... linkage to infectious disease care and substance use treatment,”⁵⁹ fentanyl testing strips,⁶⁰ and naloxone (opioid overdose reversal medication).

A 2021 study on the use of fentanyl test strips by SSP participants to rapidly test drugs for the presence of fentanyl and certain fentanyl-like substances found high utilization (70 percent at one site, 77 percent at the other) and, following utilization, adoption of risk reduction behaviors among some respondents (23 percent of respondents at one site, 69 percent at the other).⁶¹

Evolving Views of Problematic Substance Use

Changing Models for Explaining Problematic Use

For much of the 20th century, many in the addiction field viewed problematic substance use as primarily or entirely due to moral failure or weakness of character. This moral model holds the individual solely and consciously responsible for developing as well as continuing problematic use. Much of the stigma that still surrounds problematic substance use stems from this idea of moral failure.⁶²

The widespread acceptance of the moral model by the general public and treatment professionals, and the associated stigmatizing attitudes, discouraged many people with problematic substance use from seeking treatment or other paths to recovery.⁶³ And much of the treatment predicated on the moral model wasn’t effective or evidence based.⁶⁴

More addiction experts began promoting a chronic disease model of problematic substance use during the second half of the 20th century, in part to counteract the harmful practical effects of the moral model. If conceptualized as a chronic disease, then problematic substance use lends itself to scientifically based clinical interventions that merit insurance coverage and government funding. In recent decades, researchers have homed in on substances’ harmful effects on the structures and processes of the brain in particular to explain the chronic and recurring nature of problematic use.^{65,66}

The chronic disease model, including the brain disease model, has been criticized from several directions. For example, different critics argue that it⁶⁷:

- Can lead an individual with problematic use to feel hopeless about the possibility of recovery.
- Fails to take into account the factors in an individual’s environment and experience that can underlie problematic use, such as poverty or trauma.
- Doesn’t explain why most people who drink alcohol don’t develop AUD, or why most people who develop problematic alcohol use resolve it over time, often without treatment.^{68,69}
- Overlooks research showing that use of substances is sensitive to their price and availability and to the attractiveness and availability of other activities and commodities.⁷⁰

Some addiction researchers now apply a multifactorial approach to facilitate understanding of problematic substance use and recovery from it. This model looks at the interplay of biological, psychological, social, and environmental factors to explain the origins of problematic substance use (the biopsychosocial concept).^{71,72,73,74} The same approach has been applied to schizophrenia and chronic pain, for example.^{75,76,77}

The biological component largely involves the role of genetics and epigenetics in predisposing people to develop problematic use.⁷⁸ A wide range of psychosocial factors seem to put people at higher risk for problematic use, including:

- Certain personality traits, such as impulsivity and low agreeableness.^{79,80}
- Mental disorders.⁸¹
- Pain.
- Positive outcome expectancies (perceptions that substance use will have beneficial or otherwise desirable effects).⁸²
- Having parents whose attitudes and behavior endorse substance use.
- Belonging to a peer group that uses substances.
- Having a spouse or intimate partner who uses substances.^{83,84}

Environmental factors range from the availability of substances to the level of neighborhood disorganization, which encompasses aspects like high crime rates, residential instability (frequent moves by households), and deteriorating buildings, streets, and public spaces.^{85,86}

A 2018 systematic review of SUD treatment providers' opinions about different models suggests that many providers also endorse a combination of models, although belief in the moral model persists alongside acceptance of the disease model and biological, psychological, social, and environmental explanations.⁸⁷

Neurological, Genetic, and Epigenetic Bases for Problematic Substance Use

It has taken decades of research to begin to develop a clear picture of the complex biological underpinnings of problematic substance use, let alone to use this picture to inform treatment. Fruitful areas of research include:

- The neurological characteristics that may predispose people to problematic use.
- The ways problematic substance use changes the brain.
- The genetic markers associated with an inborn vulnerability to certain SUDs.
- The role of epigenetics, where environmental factors can switch gene expression "on" or "off" without changing the underlying DNA.

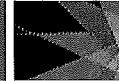
This evolving body of knowledge can point to new pathways for prevention, diagnosis, and personalized treatments that take each person's neurological and genetic characteristics into account.

Neurological

Research has made it increasingly clear that substances change the way the brain works, and that some people's brains are naturally more vulnerable to problematic substance use.⁸⁸ An increased understanding of these mechanisms has generated, and continues to generate, more effective evidence-based treatment options.

All addictive substances cause increases in the release of the neurotransmitter dopamine, activating the reward centers of the brain.⁸⁹ Problematic use can be thought of as a repeating cycle with three stages, each associated with a specific brain region⁹⁰:

- **Binge/intoxication** (associated with the basal ganglia), the stage at which a person consumes an intoxicating substance and experiences its rewarding or pleasurable effects



- **Withdrawal/negative affect** (associated with the extended amygdala), the stage at which a person experiences a negative emotional state in the absence of the substance, and ordinary rewards lose their power
- **Preoccupation/anticipation** (associated with the prefrontal cortex), the stage at which one craves substances again after a period of abstinence

THE MODERN RECOVERY MOVEMENT: A BRIEF HISTORY

Since the late 20th century, people in recovery from substance use–related problems have participated in and provided leadership to a growing nationwide recovery movement. The movement advocates for and organizes communities of recovery and has created diverse support approaches and institutions tailored to meet specific community and individual needs. (Note that American Indians and Alaska Natives have a long history of recovery movements.)⁹¹

The modern-day recovery movement can trace its origins in part to the many secular and religious mutual-help groups formed in the 19th century to address addiction. Although these efforts subsided in the early 20th century, following the establishment of alcohol and drug prohibition movements, they set the stage for the rise of Alcoholics Anonymous®, related 12-Step programs for other substances, and religious and secular alternatives to 12-Step organizations. These organizations provided a model for grassroots, person-driven, mutually supportive approaches to overcoming substance use–related problems.⁹²

Today's recovery movement also developed in reaction to certain aspects of the new professional SUD treatment system that came into being during the mid-20th century. These aspects include the treatment system's typical⁹³:

- Focus on individuals in treatment, rather than the individuals plus their family members and community.
- Delivery of episodic treatment ending with discharge, without provision for ongoing support.
- Reliance on professionals as the decision makers, often excluding the individuals in treatment.
- Emphasis on fixing people's problems instead of building their strengths.

Other drivers of the recovery movement included the criminalization of addiction and ongoing stigmatization of people with substance use–related problems.

In response, the 1990s saw new grassroots entities called recovery community organizations spring up around the country to enable people in recovery, and their families and allies, to come together to engage in recovery advocacy and to support each other in their recovery journeys. A national recovery summit convened in St. Paul, Minnesota, in 2001 brought together representatives of these organizations and national recovery advocacy organizations, who forged what became a national movement to elevate recovery as a focus of treatment, research, public awareness, and institution building. The summit also saw the launch of a new organization, Faces & Voices of Recovery, to represent the RCOs and people in recovery generally.⁹⁴

SAMHSA provided significant support to the developing movement by helping fund RCOs and the 2001 summit. In 2005, SAMHSA convened the National Summit on Recovery to reach consensus on the guiding principles of recovery (Exhibit 1.1) and elements of recovery-oriented systems of care (ROSCs). ROSCs are discussed in detail at the end of this chapter. The summit had as its overarching goal promoting better integration of recovery into policy, services, and systems of care for people in or seeking recovery.⁹⁵

New Institutions—such as RCCs, recovery cafés, and collegiate recovery programs, described elsewhere in this TIP, especially Chapter 4—have come out of the recovery movement, as has a new type of service for people in or seeking recovery: PSS. The movement has become even more inclusive of families and different cultural approaches, and it focuses on developing systems of care and communities that support recovery.

INSIGHTS FROM BRAIN IMAGING

Functional magnetic resonance imaging, which measures changes in blood flow in the brain to show how it behaves in response to certain stimuli, offers many new insights about the action of substances on the brain, the effects of stress, variations in resilience and resistance to problematic substance use, and the neurobiology of craving. The results of some recent studies are described below:

- Brain activity was measured in 162 individuals, in the presence of stimulant drugs and with known levels of familial risk for SUD and/or previous drug use. The imaging studies showed that the likelihood of developing addiction, whether due to familial vulnerability or drug use, was associated with fewer connections in orbitofrontal and ventromedial prefrontal cortical-striatal circuits—pathways critical to goal-directed decision making. Resilience against SUD, on the other hand, was associated with more connections in two networks: the lateral prefrontal cortex and medial caudate nucleus, and the supplementary motor area, superior medial frontal cortex, and putamen—brain circuits involved, respectively, in top-down inhibitory control and habit regulation.⁹⁶
- A review of more than 40 imaging studies on individuals using various substances, including alcohol, cocaine, opioids, and cannabis, found fundamental differences between individuals who sustained abstinence and individuals who had recurrences. Participants who had recurrences showed greater activation to drug-related cues and rewards, but reduced activation to non-drug-related cues and rewards in multiple brain regions as well as weakened functional connectivity in the same regions and reduced gray and white matter volume and connectivity in prefrontal regions. The authors suggested that such findings might be used to predict which individuals are at greatest risk of recurrence, and to support them with extra treatment and attention.⁹⁷
- A meta-analysis of 99 imaging studies encompassing alcohol, cocaine, cannabis, and nicotine looked at the differences in brain activity associated with using each substance. Alcohol use altered the frontal regions of the brain more than the other substances did and was associated with impaired cognitive flexibility and attention. Cannabis use also showed more frontal alterations compared with cocaine, which showed greater dysregulation in the brain's reward circuits.⁹⁸

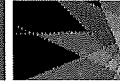
Genetic

The ability to identify individual genes and study their function has transformed the understanding of the relationship between “nature” and “nurture.”

It's long been recognized that the risk of developing an SUD can run in the family. Although estimates vary on how much of the risk is inherited, they average around 50 percent, and can be higher or lower depending on the substance in question. For AUD, estimates of heritability go as high as 64 percent; for cocaine use disorder, they are between 40 and 80 percent;⁹⁹ and for cannabis, they are between 51 and 74 percent.¹⁰⁰ Particularly useful for this type of research are studies of identical twins who have been adopted into different families, and thus offer an opportunity to study nature and nurture separately.¹⁰¹

Initially, the effort to find genetic associations with SUDs focused on identifying individual “candidate” genes. Although 99.9 percent of genetic material is the same in everyone, 0.1 percent represents millions of tiny variations.¹⁰² These variations are called single nucleotide polymorphisms (SNPs), and they may or may not manifest themselves in individuals' appearance, abilities, health, and susceptibility or resistance to SUDs.¹⁰³

Many researchers have looked for SNPs that can be associated with SUDs. They've discovered a few promising leads: one SNP that correlates with cocaine dependence,¹⁰⁴ and several that are associated with cannabis use.¹⁰⁵ Most often, researchers look at, or near, genes that are already known to be associated with dopamine or other neurotransmitters involved in the cycle of addiction.

**A GWAS FOR CANNABIS¹⁰⁶**

A landmark GWAS conducted in 2019 by an international consortium of researchers found an association between cannabis use disorder (CUD) and variants of gene *CHRNA2* located on chromosome 8. The variants associated with CUD were also associated with decreased cognitive performance and increased risk of schizophrenia and attention deficit hyperactivity disorder. The study authors speculated that these multiple associations might explain why people with schizophrenia use cannabis at relatively high rates. The authors further speculated that the frequently observed relationship between poor educational performance and CUD might be due to genetic risk factors that occur together, rather than the disorder itself.

Although these discoveries are important, there's more to the story. The key to understanding SUDs and many other medical puzzles will likely be not one gene but many, each of which makes a small contribution to the relative risk of developing a condition, or the ability to resist developing it. The advent of "big data"—genomic databases that also include detailed information on the owners of the DNA—has enabled genome-wide association studies (GWAS)¹⁰⁷ that attempt to make these complex connections. Researchers can study which widely scattered genes contribute to substance use and the patterns of polysubstance use, and possible explanations for the observed linkages between SUDs and mental disorders like depression and schizophrenia.

Ultimately, studying the genome may point to better ways to prevent problematic substance use by helping people learn whether they are particularly vulnerable to it.

Epigenetic

Epigenetics is the study of factors that can change gene activity without changing the DNA sequence. "Epi-" means "on" or "above" in Greek. Epigenetic changes are changes to DNA that determine whether gene expression

is turned on or off. Within the DNA in a cell (i.e., the genome), all of the modifications that regulate the activity, or expression, of the genes are collectively known as the epigenome.¹⁰⁸

There are several types of epigenetic modification. Two common ones are DNA methylation (the attachment of small chemical groups called "methyl groups" that can "silence" a gene) and histone modification, a change in the structural protein that gives chromosomes their shape. This modification, also caused by the addition or removal of small chemical groups, determines how tightly the DNA is wrapped around histones, which affects whether gene expression is turned on or off.¹⁰⁹ For example, studies of rats have shown that exposure to cocaine, either acute or chronic, causes histone modifications in the nucleus accumbens, a key brain region that mediates reward and satisfaction.¹¹⁰ Exposure to addicting substances has been shown to alter how this region functions, increasing its sensitivity to a given substance and decreasing its sensitivity to other types of rewards.¹¹¹

GWAS, discussed above, have identified several gene variants linked with SUDs, but even added all together, they don't account for all of the observed heritability of these disorders. Some research suggests that environmental stressors bring about epigenetic modifications that can be inherited by the next generation. For example, children of female survivors of the Holocaust have shown increased vulnerability to posttraumatic stress and other mental disorders.¹¹² Although epigenetic changes don't alter the underlying DNA, they are both stable and heritable. This mechanism is thought to be one way that parents pass on to their children a predisposition toward problematic substance use, which they in turn can pass on to their own children. It's unknown whether such heritability can affect multiple generations.¹¹³

However, epigenetic modifications are also dynamic; it may be possible to reverse them, even if the person has inherited them. This biological flexibility has implications for SUD-related epigenetic changes, either inherited or caused by a current SUD episode.¹¹⁴

Socioenvironmental Influences on Vulnerability to Problematic Substance Use

Trauma and Problematic Substance Use

SAMHSA defines trauma through the three Es: **events**, the **experience** of those events, and the long-lasting adverse **effects** of the event.^{115,116} Events include the actual or threat of physical or psychological harm and may occur as a single event or repeatedly over time. How a person experiences these events determines whether it is considered traumatic. The long-lasting adverse effects of an event can occur immediately or be delayed.¹¹⁷ Thus, individual trauma is a result of an event or series of events that is physically or emotionally harmful, or life threatening, and that has lasting adverse effects on a person's mental, physical, social, emotional, or spiritual well-being.¹¹⁸ Trauma that affects communities, known as community trauma, includes a range of violence and atrocities that erode the sense of safety within a given community.¹¹⁹ This type of trauma can also result from attempts to dismantle systemic cultural practices, resources, and identities.¹²⁰

People experience trauma in different ways and may experience multiple traumatic events.

Trauma can occur in three forms¹²¹:

- Acute trauma, referring to one incident of trauma that is relatively short in duration.
- Chronic trauma, which includes repeated and prolonged trauma.
- Complex trauma, or prolonged and repeated trauma that is invasive or interpersonal in nature.

More information about the definition of trauma can be found at <https://store.samhsa.gov/sites/default/files/d7/priv/sma14-4884.pdf>.

Physically or emotionally harmful or life-threatening experiences (e.g., sexual assault, exposure to gun violence), can lead to trauma that causes lasting adverse effects on a person's mental, physical, social, and emotional well-being.^{122,123,124}

Evidence suggests a strong connection between the experience of trauma and problematic substance use.¹²⁵ Clients with a history of problematic substance use may also have a history of trauma that is connected to this use, even though they may not be able to recall aspects of their trauma. Chapter 3 provides guidance about trauma-informed care approaches that can help guide work with these clients. The following sections summarize some of the types of trauma that may affect clients.

Adverse childhood experiences (ACEs) and problematic substance use.

ACEs include traumatic events that occur during childhood, such as physical or emotional abuse, or parental neglect.^{126,127} Stress from ACEs can affect brain development, resulting in long-term negative health and emotional consequences for the person, such as problematic substance use, including SUD.^{128,129,130}

Many studies have linked ACEs to problematic substance use later in life.^{131,132,133,134,135,136} For example, experiencing childhood trauma, including emotional maltreatment, physical maltreatment, and sexual abuse, increases the risk of problematic substance use.¹³⁷ One study identified a history of ACEs among more than 70 percent of adolescents with problematic opioid use.¹³⁸ Clients with a history of ACEs benefit from trauma-informed and culturally sensitive approaches.¹³⁹

RESOURCE ALERT: SCREENING FOR ACES AND TRAUMA

A discussion of when and how to screen for ACES and trauma is in the technical assistance tool *Screening for Adverse Childhood Experiences and Trauma*, published by the nonprofit Center for Health Care Strategies and available via <https://www.chcs.org/resource/screening-for-adverse-childhood-experiences-and-trauma/>. The publication includes a widely used and validated questionnaire for measuring the impact of child abuse and neglect on health and well-being.

Historical, intergenerational, and racial trauma and problematic substance use.

Clients may have also experienced historical, intergenerational, or racial trauma. Historical trauma refers to traumatic experiences or events shared by historically oppressed groups. Intergenerational trauma passes down from those who directly experience the trauma to subsequent generations. Intergenerational trauma can occur as a result of historical or racial trauma.¹⁴⁰ Racial trauma results from exposure to racism, racial bias, and discrimination. People who experience these forms of trauma may be more likely to have problematic substance use:

- **Historical trauma.** Historical trauma affects members of different population groups. For example, studies of American Indian and Alaska Native (AI/AN) individuals have found that greater frequency of thoughts about historical trauma (such as that resulting from removal from their traditional lands and forced assimilation) is associated with substance use.¹⁴¹ In the case of Black individuals, historical (and intergenerational) trauma is especially associated with the experience of slavery and segregation.^{142,143,144} Historical trauma, along with unresolved grief from this historical trauma and continued discrimination, affects mental health, which can result in greater problematic substance use.¹⁴⁵

- **Intergenerational trauma.** One mechanism by which intergenerational trauma is thought to occur is through parents affected by their own childhood trauma, transmitting this trauma to their children via parenting behaviors and attachment difficulties.¹⁴⁶ It should be noted that most research on this aspect of intergenerational trauma has looked at maternal parenting.^{147,148} Problematic substance use is a parental behavior that can contribute to childhood trauma and subsequent substance use,^{149,150} which risk, in turn, being transmitted in a cycle of intergenerational trauma.¹⁵¹
- **Racial trauma.** People who experience racial discrimination and oppression may be more likely to have problematic substance use.^{152,153} People experiencing racism and trauma may be more likely to have problematic substance use and face barriers to recovery.¹⁵⁴ Research has also shown that racial microaggressions, subtle and more frequent racist interactions, are associated with problematic substance use.¹⁵⁵

RESOURCE ALERT: SAMHSA TIP ON BEHAVIORAL HEALTH SERVICES FOR AI/AN

SAMHSA's TIP 61, *Behavioral Health Services for American Indians and Alaska Natives*, provides behavioral health professionals with background on Native American history, historical trauma, and cultural perspectives to inform work with Native American clients. The TIP discusses the demographics, social challenges, and behavioral health concerns of Native Americans. It highlights the importance of providers' cultural responsiveness and culture-specific knowledge.

The document can be accessed at <https://store.samhsa.gov/product/TIP-61-Behavioral-Health-Services-For-American-Indians-and-Alaska-Natives/SMA18-5070>.

Awareness of historical, racial, and intergenerational trauma, along with training to deepen understanding of these types of trauma, can help counselors support affected clients in a culturally sensitive manner and avoid retraumatizing them. Using a “culture broker” (someone of the same culture as the client) as an intermediary can prove beneficial in this regard.^{156,157}

Sexual orientation, gender identity, and trauma. Research indicates that individuals who identify as lesbian, gay, bisexual, transgender, queer or questioning, and intersex (LGBTQI+) report exposure to trauma, such as ACEs, more frequently than cisgender (individuals whose gender identities, expressions, and roles align with the sex assigned to them at birth and the culturally established categories of gender) and heterosexual individuals.¹⁵⁸ Emotional abuse and neglect are commonly reported among this population.¹⁵⁹

Individuals identifying as LGBTQI+ are also more likely to be exposed to minority stress, or stress related to stigma, discrimination, and oppression that they experience due to their nonheterosexual relationships and nonbinary identities.^{160,161} Exposure to minority stress and trauma have been shown to negatively affect health outcomes and coping behaviors, including substance use.¹⁶²

RESOURCE ALERT: SAMHSA RESOURCES ON LGBTQI+ POPULATIONS

For more resources and information about LGBTQI+ populations, including national survey reports, agency and federal initiatives, and related behavioral health resources, visit <https://www.samhsa.gov/behavioral-health-equity/lgbtqi>.

Epigenetics and trauma. The connection between trauma and epigenetics is an important area of ongoing research. Studies suggest that trauma passes down from generation to generation through epigenetic mechanisms (epigenetics is discussed in the previous section).^{163,164,165} Examples include studies of parental stress and changes in the epigenetics of offspring,¹⁶⁶ and the impact of childhood trauma on epigenetics. Researchers continue to explore the connection between trauma and changes to how genes work.¹⁶⁷

Intimate partner violence (IPV) and problematic substance use. IPV, or abuse that occurs within a romantic relationship, is a significant public health issue.¹⁶⁸ IPV affects millions of people each year.¹⁶⁹ In fact, one in three women has experienced lifetime physical or sexual violence or stalking by a partner or ex-partner.¹⁷⁰ Research shows that LGBTQ individuals disproportionately experience higher rates of IPV than their cisgender heterosexual counterparts.^{171,172} LGBTQ individuals who have experienced IPV also have higher rates of substance use.¹⁷³ Additionally, studies indicate that problematic substance use is common among both perpetrators and victims of IPV.¹⁷⁴

Individuals who have experienced IPV may initiate substance use as a mechanism to cope with the fear or violence or with conflict in the relationship. Problematic substance use may also result from either partner in the relationship having a co-occurring mental disorder.¹⁷⁵ Perpetrators of violence may use substances as an “excuse” for aggression toward the victim.¹⁷⁶

IPV may also be accompanied by substance use coercion, which includes such tactics as forcing a partner to use substances or to use more than they want; controlling or interfering with a partner’s SUD treatment; or undermining a partner’s recovery.¹⁷⁷ A voluntary survey conducted with 3,056 people who experienced domestic violence (or violence occurring between any two

people in a household) and who called the National Domestic Violence Hotline during a 6-week period in 2012 found that 801 reported being pressured or forced by the partner who was abusive to use substances or to use more than they wanted. And of the 306 survey respondents who had tried to get help for substance use “in the last few years,” 181 said that the person who was abusive had interfered with their getting help.¹⁷⁸

The Social Determinants of Health and Problematic Substance Use

The social determinants of health (SDOH) are conditions that affect a range of health and quality-of-life outcomes.¹⁷⁹ Counselors need to recognize and understand the connection between SDOH and problematic substance use to fully support clients in their recovery journey.¹⁸⁰ Chapter 2 has tools to assess SDOH.

The Department of Health and Human Services’ (HHS) Office of Disease Prevention and Health Promotion groups SDOH into the following five domains¹⁸¹:

- **Healthcare access and quality:** People lacking access to health care may be unable to receive the care they need and may forgo needed preventive care or treatment for illnesses.
- **Education access and quality:** People with higher levels of education are more likely to live healthier lives because of their ability to obtain safe, high-paying jobs. People with less education and poorer quality of education have fewer employment opportunities and are more likely to face health problems, such as heart disease, diabetes, and depression.^{182,183}
- **Social and community context:** Relationships and interactions with family and friends and strong ties with the community can help support health and well-being. Conversely, experiencing interactions involving racism or discrimination can negatively affect health.¹⁸⁴

- **Economic stability:** A close link exists between access to financial resources and health and well-being. People living in poverty or with financial instability have poorer health. Without access to income, people may be more likely to forgo needed health care or be unable to pay for food or housing.
- **Neighborhood and built environment:** Neighborhood and the built environment encompasses safety, housing quality, access to transportation and healthy food, and environmental conditions, such as water and air quality. These factors can directly affect health. For example, people who live, work, or go to school in neighborhoods with high rates of violence or unsafe air or water may have poorer health.

A person facing challenging SDOH is more likely to develop problematic substance use.^{185,186} These same unfavorable SDOH may also affect a person’s recovery.¹⁸⁷ The following sections provide more information about SDOH and their connection with problematic substance use.

Economic stability and problematic substance use. Studies indicate that economic instability—including financial hardship, poverty, unemployment, and housing instability—is closely tied to problematic substance use.^{188,189} For example, a 1-percentage-point increase in the county unemployment rate predicts a 7.0-percent increase in the opioid overdose ED visit rate and a 3.6-percent increase in the opioid death rate.¹⁹⁰ And annual SUD treatment admissions go up when state unemployment rates go up.¹⁹¹

Looking at housing status, homelessness is associated with an increased risk of substance use, SUD symptoms and diagnoses, and overdose mortality.¹⁹² Renting, compared with owning a home, is associated with an increased risk of fatal opioid overdose.¹⁹³ Researchers studying the effects of residential mobility on drug

involvement among young adults found that frequent moves or changes of residence were linked to a greater likelihood of receipt of drug offers, drug use, drug selling, and drug-related arrest, particularly for young women.¹⁹⁴

A 2020 study discusses the economic challenges that people who use both opioids and methamphetamine face on top of the health challenges of such use. Compared with people who use opioids only, people who use both opioids and methamphetamine (or methamphetamine only) are more likely to be unstably housed and to fall below the federal poverty line.¹⁹⁵

Social and community context and problematic substance use. Weaker family and social connections may be a risk factor for problematic substance use.¹⁹⁶ Also, exposure to substance use by family members, or permissive substance use by family members, can lead to problematic substance use.¹⁹⁷ A lack of community support may also contribute to problematic substance use.¹⁹⁸ Counselors should support clients in recovery in developing close family and social connections, which can positively affect recovery from problematic substance use.

Social factors, such as socially determined stressors, exposure to socially toxic environments (violence, poverty, and economic stressors), and racism and discrimination, may increase vulnerability to problematic substance use. Chronic exposure to stressors resulting in overactivation of the stress response has been demonstrated to be disruptive to the body and to disturb other functions, such as the working of the brain's reward pathways—increasing the risk of substance use and SUD.¹⁹⁹ Similarly, exposure to traumatic events and chronic stress in childhood may lead to depression and other mental disorders, and ultimately, to problematic substance use to reduce negative emotions.²⁰⁰

Racism and discrimination can also increase vulnerability to problematic substance use. In one study, the experience of discrimination led to a greater willingness to initiate substance use. Self-reported and perceived racism and discrimination increased the risk of substance use among Black individuals.²⁰¹

Immigration status is a stressor linked with problematic substance use in some emerging research.²⁰² A 2016 review of studies on psychosocial risk factors associated with the behavioral health status of undocumented immigrants in the United States found “substance use/abuse” among the “prevalent themes” identified.²⁰³ And a 2022 study of immigration-related stressors experienced by a national sample of U.S.-born Latino individuals found that experiencing a higher number of such stressors—including ever fearing or worrying about being stopped or questioned about immigration status by immigration officials—increased the odds of problematic substance use.²⁰⁴ Looking at some specific stressors, the study found that, for example:

- Ever fearing or worrying about being detained for immigration reasons was associated with a more than twofold increase in the odds of cocaine use and prescription sedative and prescription opioid “misuse” in the past year.
- Ever fearing or worrying about the possibility of being deported for immigration reasons was strongly associated with high-intensity drinking in the past year.

Neighborhood and built environment and problematic substance use. Where someone lives matters when it comes to problematic substance use. For example, researchers have established links between drug overdose and a deteriorating urban built environment with such characteristics as dilapidated or burned buildings, vandalized public property, and unclean streets.^{205,206,207} As another example, research on early initiation of alcohol and cannabis use among

Black and Hispanic adolescents in families of low income suggests that a significant risk of initiation is conferred by exposure to neighborhoods with such negative aspects as robbery and assault.²⁰⁸ (Adolescent initiation of substance use is concerning in part because it is associated with a greater risk of problematic substance use in adulthood.²⁰⁹) And researchers who studied SDOH, substance use, and drug overdose at the county level in the Mid-Atlantic region of the United States have shown a statistically significant positive correlation between the violent crime rate and drug overdose deaths.²¹⁰

In addition, living in a neighborhood or community with inadequate or unaffordable public transportation can make it difficult for people with problematic substance use and limited income to participate in treatment²¹¹ and recovery support services.

Education access and quality and problematic substance use. Studies indicate a connection between problematic substance use and poorer quality or less education.^{212,213} Research indicates that education can be a protective factor in drug overdose deaths and, in fact, the highest overdose rates are among people who did not finish high school, and the lowest are among those who finished college.²¹⁴ A limited education may also keep people from accessing adequate information and resources related to substance use treatment,²¹⁵ an area where counselors may be able to step in to support clients.

Healthcare access and quality and problematic substance use. Without access to health care and insurance, or the ability to pay for health care or obtain adequate health insurance, people may be less likely to receive the health care or preventive services they need. This may result in more health problems and stress, factors related to increased risk of developing problematic substance use.²¹⁶ It can also be difficult to get treatment for problematic substance use. As one study noted, counties

with a higher proportion of uninsured and Black residents are less likely to have SUD treatment programs that accept Medicaid.²¹⁷

RESOURCE ALERT: SAMHSA'S OFFICE OF BEHAVIORAL HEALTH EQUITY

SAMHSA's Office of Behavioral Health Equity coordinates SAMHSA's efforts to reduce disparities in mental and/or substance use disorders across populations.²¹⁸ Its website offers resources about behavioral health equity, including population-specific information, data sources, and workforce development opportunities. More information is available at <https://www.samhsa.gov/behavioral-health-equity>.

Mental Illness and Vulnerability to Problematic Substance Use

Mental illness and problematic substance use have long been observed to occur together frequently, but whether one leads to the other remains a subject of research. A large foundational 2010 study on the role of mental disorders as risk factors for subsequent onset of substance use and SUDs stated, "Mental disorders can be conceptualized legitimately as risk factors [for substance dependence as defined by the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders*; DSM] due to the fact that they precede SUDs, are associated with increased probability of their initial onset and permit the population to be divided into high- and low-risk groups."²¹⁹ (The study acknowledged but did not examine associations between preexisting substance dependence and onset of mental illness.)

A follow-up 2016 study among adolescents by several of the same authors found that any prior lifetime mental disorder significantly increased the risk of transition from nonuse to first use of substances, and from use to substance use-related problems.²²⁰ This finding was important, because although

some adolescents will later “age out” of problematic substance use, many will have such use persist into adulthood.

Although the pathways by which mental illness contributes to susceptibility to problematic substance use are not fully understood, evidence-based theories exist. One longstanding theory is the self-medication hypothesis, which suggests that individuals with mental disorders use substances to cope with difficult symptoms associated with these disorders, or to lessen the unpleasant side effects of medication taken for the disorders.²²¹ A 2018 literature review found evidence to support the self-medication hypothesis. Between 21.9 and 24.1 percent of respondents with mood disorders or anxiety disorders reported using substances to relieve the symptoms of these disorders.²²² The same study highlighted longitudinal research showing that people who report self-medicating for symptoms of mood and anxiety disorders are more likely to develop SUD.^{223,224}

Other explanations are that changes in the brain caused by mental illness may increase the rewarding effects of substances or decrease awareness of their harmful consequences. And some research suggests that shared risk factors may account for co-occurring substance use and mental disorders, with such risk factors including²²⁵:

- Genetic and epigenetic vulnerabilities.
- Issues with similar areas of the brain.
- Environmental factors like early exposure to stress and trauma.

Whatever the relationship between co-occurring substance use and mental disorders, they should not be treated in isolation from each other.²²⁶

Evolving Service Landscape and Workforce

For many decades, the dominant approach to addressing problematic substance use involved acute, episodic, specialized

treatment that focused narrowly on abstinence and did so from a deficits-based, clinician-driven perspective. Such treatment was typically siloed professionally and physically from other types of care and services,^{227,228} such as primary care, mental health services, and assistance with applying for public benefits and finding adequate housing.

Although this model continues to characterize much of the specialty SUD treatment field, the service landscape and the workforce for addressing problematic use are evolving—partly in response to the^{229,230}:

- Opioid overdose epidemic.
- Push for more integrated care.
- Emergence of new and broader services supporting recovery.
- Growth in telehealth.

This section looks at some of the ways that these developments are changing:

- How, where, and when people with problematic substance use enter and engage in treatment.
- Who provides treatment.
- What services people may receive before, in addition to, after, and instead of treatment in support of their recovery.

Some Evolving and Emerging Entry Points for Treatment

People enter formal SUD treatment through a wide variety of means. Primary care referral, self-referral, referral by a mental health service provider, hospitalization, and court order are some common paths. Other entry points include obstetrics and gynecology practices and recovery support settings such as collegiate recovery programs and RCOs. Counselors may also work with clients who entered or will enter treatment through one of these five evolving and emerging entry points: hospital EDs, crisis services, emergency medical services (EMS), infectious disease clinics, and prearrest diversion.

Hospital EDs

People with problematic substance use frequently require emergency care. The high incidence of problematic use among ED patients, and especially the increasing rate of ED visits for opioid overdose,²³¹ have led to growing recognition that the ED represents an important entry point for SUD treatment.²³²

Many ED patients with untreated and undetected problematic use have no other contact with the healthcare system.²³³ Others have not had their problematic use identified in other clinical settings. Even people with problematic use who previously declined to enter treatment or who haven't engaged in treatment successfully can be good candidates for interventions in the ED, because the conditions that brought them there may make them receptive to engagement or re-engagement in SUD care.^{234,235}

After treating people presenting with problematic substance use, some EDs don't carry out sufficient treatment referral activities. Other EDs screen patients and offer, as appropriate, brief interventions by clinicians and active linking or referrals to treatment. More recently, some EDs have also, or instead, begun connecting patients with problematic opioid use to peer specialists or other professionals trained to encourage motivation for and engagement in treatment.²³⁶ Peer specialists in particular can also link patients to recovery resources like RCOs.

Some EDs have begun offering initial buprenorphine treatment to patients with untreated OUD, followed by direct linkage to ongoing treatment. The American College of Emergency Physicians recommended this practice in 2021; SAMHSA described it as a best practice that same year.^{237,238}

A relatively small number of EDs start patients on medication for AUD, a common diagnosis in the ED.²³⁹ This practice may increase as more EDs become accustomed to

initiating medication for patients who have OUD and actively linking them to continuing treatment.

Counselors should learn about and stay updated on the SUD intervention practices of the EDs in their area.

Crisis Services

Crisis services are composed of three core elements: crisis contact services, mobile crisis teams, and crisis receiving and stabilization facilities. Not all communities have all elements. These services sometimes aren't equipped to handle crises related to problematic substance use only (as opposed to suicide or mental health-related crises), although there are calls for this to change.²⁴⁰

SAMHSA's *National Guidelines for Behavioral Health Crisis Care: Best Practice Toolkit* incorporates an integrated, no-wrong-door approach to crisis care.²⁴¹ A National Association of State Mental Health Program Directors' companion resource to the toolkit emphasizes that crisis response systems need to become "more inclusive of individuals with SUDs."²⁴² (Both documents can be found in *Crisis Services: Meeting Needs, Saving Lives* at <https://store.samhsa.gov/product/crisis-services-meeting-needs-saving-lives/PEP20-08-01-001>.)

Crisis contact services. 988 is a dialing and texting code that connects people anywhere in the United States to the 988 Suicide & Crisis Lifeline (formerly known as the National Suicide Prevention Lifeline). The Lifeline is staffed by trained crisis counselors who respond to calls and texts about substance use-related crises as well as suicide and mental crises. The Lifeline also accepts chats via 988lifeline.org/chat/.²⁴³ Counselors should make sure their clients are aware of the 988 Lifeline and the availability of 24/7 services in their community.

Many people also have access to state or local crisis call centers. Some states have substance use-specific hotlines, which may be able to connect individuals to

SUD treatment providers and other SUD-related services. Some states and localities have crisis call services more oriented to mental health-related crises, although these services may have some capacity to respond to substance use-related crises. And some states and localities have crisis call services with the ability to connect people experiencing either kind of crisis or at risk of suicide to mobile crisis teams and facility-based care.²⁴⁴

Mobile crisis teams. These community-based units go to the person in crisis and seek to respond quickly and effectively in a way that de-escalates the situation. Although originally focused on mental crises, some teams also have the capacity to address substance use-related crises. Mobile crisis teams often consist of a clinician and a peer specialist, with support from police or EMS, as needed.^{245,246}

Crisis receiving and stabilization facilities. These short-term facilities provide an alternative to ED care for people experiencing a substance use or mental crisis, or both. A team of behavioral health service providers assess, address acute symptoms of, and observe individuals arriving via first responders, referral, or, often, self-referral (i.e., walk-in). Not all such facilities offer withdrawal management,^{247,248} although ideally they would.

EMS

Some EMS have begun actively encouraging EMS patients who have experienced substance use-related crises, especially opioid overdose, to receive SUD treatment or recovery resources. Typically, this activity involves contacting or even conducting home or community visits to EMS patients within a few days of the initial interaction to check on them and connect them to treatment facilities, office-based opioid treatment, harm reduction services, or other recovery resources if they have not already made such connections.²⁴⁹

Such visits often involve a team. The makeup of the team varies from program to program, but often includes, in addition to an EMS or other first responder, an addiction or mental health service counselor and a peer specialist. Such teams go by several different names, including Quick Response Teams and Post-Overdose Response Teams. Many people who receive on-scene overdose care from EMS refuse emergency transport or don't act on referrals to treatment. If transported, making such follow-up on EMS overdose responses a critical opportunity to link these individuals to treatment and recovery resources.^{250,251}

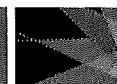
Infectious Disease Clinics

A significant percentage of the people treated in infectious disease clinics have SUDs. Because of the prevalence and negative effects of SUDs among people with HIV, for example, federal guidelines recommend routine screening for SUDs as part of HIV clinical care.²⁵² Viral hepatitis, tuberculosis, and syphilis are among the other infectious diseases for which people who use drugs are at higher risk.^{253,254,255}

Although many infectious disease specialists haven't received training on SUD **treatment**, some in the profession have begun calling for this to change, and for SUD treatment to become more integrated into the care that infectious disease specialists provide.^{256,257} One way that such integration has already been happening, although on a small scale, is through infectious disease specialists becoming qualified to prescribe buprenorphine to their patients with OUD.²⁵⁸

Prearrest Diversion

Another emerging way of entering SUD treatment is through prearrest diversion, during a law enforcement encounter, of individuals otherwise eligible for criminal charges. Largely a response to the opioid epidemic, prearrest diversion allows law enforcement officers to refer individuals with suspected or known problematic substance use for SUD diagnosis and treatment instead



of arresting them. Some prearrest diversion programs require that individuals complete an assessment for treatment, a treatment plan, or a treatment program.²⁵⁹

Prearrest diversion programs are locally led and initiated and typically involve other service partners in addition to SUD treatment programs, such as agencies and organizations providing recovery support services and case management.²⁶⁰ These programs are distinct from jail- and court-based postbooking diversion programs and specialty courts, which provide for diversion after individuals have been charged but before sentencing. The programs also differ from deflection, in which law enforcement officers and other first responders link individuals, as needed, to SUD treatment during encounters not involving the possibility of arrest, as an alternative to doing nothing.²⁶¹

SUD Treatment in Primary Care

Primary care offices are often the first point of contact for people with problematic substance use, with more providing screening and initial SUD diagnosis, and even treatment, such as some types of medication for OUD and AUD. Primary care-based SUD care offers opportunities for treatment engagement by people who^{262,263,264}:

- Can't afford or access specialized care.
- Won't use specialized care, because of concerns about stigma or other personal reasons.
- Have mild SUDs that don't require more intensive interventions.

Screening, Brief Intervention, and Referral to Treatment

The United States Preventive Services Task Force (USPSTF) recommends that primary care practices screen all adults for SUDs and refer them to treatment if screening is positive.²⁶⁵ It grades such screening "B" for effectiveness, which means the evidence is strong enough to justify insurance

reimbursement. SAMHSA recommends the Screening, Brief Intervention, and Referral to Treatment protocol. Links to several effective screening tools are available from the National Institute on Drug Abuse (<https://nida.nih.gov/nidamed-medical-health-professionals/screening-tools-resources/chart-screening-tools>).

Qualitative research suggests that universal SUD screening of adults can help alleviate patient fears about being singled out for attention.²⁶⁶

To conform to the USPSTF screening recommendation, primary care providers must be able to refer patients for appropriate treatment if necessary. Providers must therefore be aware of SUD treatment programs and other resources in their communities. Providers must also be sensitive to potential patient concerns stemming from the screening process, such as the risk of stigma or the fear of legal implications of admitting to illicit drug use. Clinicians should know their state's requirements on²⁶⁷:

- Informed consent for screening.
- Mandatory screening.
- Documentation of screening results in medical records.
- Reporting of screening results to medicolegal authorities.
- Confidentiality protections.

The brief intervention for patients who screen positive can range from 5 to 30 minutes and may employ techniques of cognitive-behavioral therapy or motivational interviewing. (Chapter 3 contains more information on these approaches.) The intervention is not meant as full treatment but is intended to encourage patients to seek treatment before a mild or moderate disorder becomes severe.²⁶⁸ Reimbursement for screening and brief intervention services in primary care settings is available through commercial insurance, Medicare, and, in some states, Medicaid.^{269,270}

Brief interventions may not be enough for people who have severe SUDs. One study of patients in federally qualified health centers found that an alternative protocol, recovery management checkups, significantly increased the number of patients who received SUD treatment, particularly those with OUD. The protocol requires a “linkage manager,” not only to encourage entering a treatment program, but also to help patients with logistics (making appointments, arranging transportation) and to check in regularly to keep them engaged with treatment.²⁷¹ This protocol can be helpful in maintaining commitment in individuals awaiting treatment intake.^{272,273}

Medication for the Treatment of SUD

Although methadone is still dispensed only through specialized clinics for the treatment of OUD, primary care providers can offer two types of medication for people with OUD: buprenorphine and naltrexone. In 2021, HHS eased the prescribing guidelines to expand the number of physicians, nurse practitioners, physician assistants, and other eligible practitioners permitted to administer buprenorphine, so that most providers with a Drug Enforcement Administration (DEA) license can treat up to 30 patients without taking special training.²⁷⁴ As of early 2023, eligible clinicians no longer need to obtain a DEA X-waiver to prescribe buprenorphine for OUD.²⁷⁵

Any provider allowed to prescribe can offer medication for AUD, using acamprosate, disulfiram, or oral or extended-release injectable naltrexone.²⁷⁶

Primary care practices that offer medication to treat OUD typically coordinate or integrate OUD treatment with other medical care and offer psychosocial services, such as counseling services or referrals.²⁷⁷ Some individuals with OUD may access medication through their primary care office because

they consider doing so more convenient or less stigmatizing than attending a clinic exclusively for people with OUD.²⁷⁸

More information is available at the Providers Clinical Support System website (<https://pcssnow.org/>), funded in part by SAMHSA.

RESOURCE ALERT: TIP 63, MEDICATIONS FOR OPIOID USE DISORDER

SAMHSA’s TIP 63, *Medications for Opioid Use Disorder*, provides an in-depth review of the Food and Drug Administration–approved medications for OUD: buprenorphine, naltrexone, and methadone. The TIP also discusses prescribing guidelines. The TIP is available at <https://store.samhsa.gov/product/TIP-63-Medications-for-Opioid-Use-Disorder-Full-Document/PEP21-02-01-002>.

Current Limitations

Many primary care practices face challenges in providing medication and other SUD care. These challenges include²⁷⁹:

- A lack of primary care providers trained in or confident about effectively treating SUDs with psychosocial and medication interventions.^{280,281}
- Lack of referral options and counseling resources because of behavioral health workforce shortages.
- Reimbursement models that do not support care coordination and psychosocial services.²⁸²
- Long travel times for some patients without access to adequate telehealth technology or transportation.

Another factor limiting the involvement of primary care providers in SUD treatment is stigma on the part of providers and administrators.²⁸³ For example, one study found that providers with higher levels of bias toward people who have OUD are less likely to prescribe medications for OUD, to believe

in the effectiveness of those medications, or even to refer patients with OUD to clinicians or opioid treatment programs that **do** provide medication treatment for OUD.²⁸⁴

Integrating Primary Care With Behavioral Health Services

U.S. health care tends to silo physical health and mental health. Primary care providers aren't typically trained to provide behavioral health services, and behavioral health service providers are often prevented by systemic barriers and patient confidentiality requirements, among other things, from coordinating an individual's treatment with their primary care provider.

People with problematic substance use could benefit significantly if these silos were removed, and they could receive treatment for this use from the same team that takes care of other aspects of their health, because²⁸⁵:

- Problematic substance use, mental disorders, and other medical conditions are often interconnected.
- Integration has the potential to reduce health disparities.
- SUD service delivery in mainstream health care can be cost effective and may reduce intake/treatment wait times at SUD treatment facilities.
- Integration can lead to improved health outcomes through better care coordination.

Several possible models are available for providing more integrated care, ranging from **collaborative care** (characterized by strong relationships between primary care and behavioral health service providers in different locations) to the **primary care behavioral health model**, where behavioral health consultants and primary care providers function as members of the same clinical team, sharing health records, treatment plans, offices, support staff, and other resources.²⁸⁶

A review of 35 models for treating OUD in primary care centers in 8 countries identified several design factors common to the most successful programs. These factors include using multidisciplinary clinical teams, often with advanced-practice clinicians (nurses and pharmacists) serving as clinical care managers; incorporating patient agreements; and offering some type of counseling, although not always through trained behavioral health specialists.²⁸⁷ (For example, some studies used nurses without previous training in SUD treatment.)

Virtual Approaches: How Telehealth Is Used in SUD Treatment

Telehealth—medical services provided remotely through computer and telecommunications networks—has been available for a long time, but quickly became an essential service when the COVID-19 pandemic limited many kinds of in-person care. The federal government and many states changed their regulations to require telehealth to be reimbursed at parity with in-person care.²⁸⁸ (As of this TIP's publication, it remains to be seen whether such parity will become permanent.)

The online delivery of behavioral health services, in particular, expanded dramatically. According to one study, telehealth availability increased by 77 percent between 2020 and 2021 for mental health service facilities and by 143 percent for SUD treatment facilities. By January 2021, 68 percent of outpatient mental health facilities and 57 percent of SUD treatment facilities in the sample studied were offering telehealth.²⁸⁹

Although traditionally "telehealth" has meant meeting with a provider over the phone or through video, smartphones and remote monitoring technology have expanded the definition to include asynchronous encounters, such as texting or sharing data from a phone app or monitoring device.²⁹⁰

Delivering SUD Treatment Services via Telehealth

Telehealth can expand access to SUD care for people who feel stigmatized seeking treatment and prefer not to visit an office or clinic. Telehealth can also bring care to^{291,292}:

- Rural residents.
- People who live far from their provider's office or lack access to reliable transportation.
- People who have medical conditions or physical disabilities that make it difficult to travel.
- People who need a provider type or service not available in their area.

For clinicians, telehealth can²⁹³:

- Increase their availability for clients with complex needs.
- Allow them to spend more time delivering services requiring their clinical expertise and interaction with clients.
- Enable them to spend less time during appointments going over standard but clinically important educational content by allowing clients to review this material asynchronously.

The research on SUD treatment through telehealth is mixed. Patients surveyed in one study were satisfied with their services overall, especially for individual therapy (90 percent "very satisfied"). Three out of four were very satisfied with receiving medication management for SUD via telehealth, although group therapy scored lower (only 58 percent "very satisfied"). Respondents liked the ability to receive services from home without having to travel but disliked the potential to be interrupted and felt they didn't connect well with others in group therapy.²⁹⁴ One limitation of the study is that the participants were predominately male, White, and well-educated.

A review of several provider studies confirmed these patients' perceptions. Providers overall thought individual therapy could be delivered slightly more effectively via telehealth than in person, but said most other services, including intake assessments and medication prescribing, were better done in person. The biggest disparity was for group counseling, which 62 percent said was more effective in person.²⁹⁵

SUD treatment programs may benefit from a hybrid approach. One study of more than 3,000 people in intensive outpatient treatment during the pandemic showed that a hybrid approach was more effective than either all in-person or all-telehealth treatment at keeping them in the program until completion.²⁹⁶

In-person treatment may be best for several categories of people, including²⁹⁷:

- New clients.
- Clients who are homeless.
- Clients who are isolated.
- Clients who are uncomfortable with technology or lack access to reliable technology.²⁹⁸
- Clients who have challenges with paying attention.
- Clients who lack private places to talk.

Telehealth may work well for:

- People with young children.
- People who have difficulty taking time off work and traveling to appointments.
- People who prefer meeting virtually.

Even for clients who usually opt for telehealth, providers may at times want to observe them in person to monitor symptoms and build rapport.²⁹⁹

TELEHEALTH FOR MONITORING DRUG USE?

At the onset of COVID-19, many SUD providers abandoned routine urinalysis because of the risk of viral exposure involved with collecting specimens. A lab in Vermont tested a “telecollection” protocol that allowed people to collect specimens at home, with trained observers watching via the patients’ smartphones.³⁰⁰ The protocol required:

- Accessible technology that was easy to use.
- An experience that gave patients a sense of control.
- Detailed patient education, via video and printed instructions.
- Trauma-informed training for observers, focusing on compassion and stigma prevention.

Patients received a special phone holder to help them position their smartphone for a specific side view, and observers used a computer in a windowless room so that the collection could not be seen by anyone else. The collections were not recorded. Patients packed the samples in kits provided by the lab that included shipping materials and shipped specimens at room temperature the same day from their home or at a local drop-off site. (Specimens stay stable at room temperature for up to 2 weeks.)

Patient satisfaction averaged 9.5 on a 10-point scale for comfort and convenience.

Some SUD providers do oral swab tests via telehealth, with questionable results followed up by a laboratory urine test.^{301,302,303}

Challenges for Telehealth

Although telehealth for SUD treatment will continue to develop, it faces several obstacles³⁰⁴:

- **Access to technology.** High-speed broadband Internet connections are not universal: for example, 58 percent of rural

residents have reported access problems. Of adults in low-income households (less than \$30,000 in income a year), 29 percent don’t have a smartphone, 44 percent don’t have broadband, and 46 percent don’t own a computer. These barriers to telehealth can increase inequities in access to treatment.

- **Unpredictable regulatory environment.** Telehealth regulations and reimbursement requirements are still changing.
 - **Privacy concerns.** Patient confidentiality rules, both federal and state, were largely developed before the Internet was used for healthcare delivery. Providers need to be vigilant to protect their clients’ privacy and guard against data breaches and other threats. Providers should also carefully vet apps used to support recovery.
- The consensus panel for this TIP expressed concern that such apps may not be as careful with people’s data as providers are.**

Counselors using telehealth in SUD treatment need to be sensitive to the “digital divide” that may keep some clients from readily accessing this technology. As already discussed in this section, such obstacles can include the inability to access reliable digital technology because of income level or geographic location. Language and cultural barriers and lack of familiarity with digital technology because of older age can also come into play.^{305,306}

Counselors should consider alternatives to telehealth for clients affected by the digital divide. Counselors should also be aware of two federal programs that may help qualifying clients of lower income to afford the necessary technology: the Affordable Connectivity Program (<https://www.affordableconnectivity.gov>) and Lifeline Support (<https://www.lifelinesupport.org>).

RESOURCE ALERT: SAMHSA ADVISORY ON TECHNOLOGY-BASED THERAPEUTIC TOOLS

SAMHSA's 2021 *Advisory*, *Using Technology-Based Therapeutic Tools in Behavioral Health Services*, summarizes the key issues in telehealth for behavioral health services, including access to technology, licensing and regulation, reimbursement, privacy, informed consent, training and support, and best practices. The *Advisory* is available via <https://store.samhsa.gov/product/advisory-using-technology-based-therapeutic-tools-behavioral-health-services/pep20-06-04-001>.

Increasing Use of PSS

One of the most pronounced developments in behavioral health services in recent years has been the growth in delivery of PSS to people with past or present problematic substance use.³⁰⁷ These nonclinical services, provided by people with lived experience of behavior change and recovery from problematic substance use, support service recipients in initiating, strengthening, and sustaining recovery.³⁰⁸

PSS for problematic substance use evolved in part from the sort of peer-to-peer support provided by mutual-help organizations like Alcoholics Anonymous®, although the peer specialist position differs in significant ways from that of the mutual-help sponsor. A peer specialist serves as a role model for recovery to the individuals they work with, while also coaching them on^{309,310}:

- Building recovery-related skills, such as coping and job-readiness skills.
- Increasing social supports (e.g., through attending substance-free gatherings together).
- Accessing needed services and resources, such as primary care and legal assistance.

Peer specialists also provide emotional support to people in recovery. For example, peers typically meet with people in person or

check in by phone or some other means on a routine basis to offer encouragement and empathy.

Formal PSS for problematic substance use as known today developed in the 1990s.³¹¹ Grant funding from SAMHSA and Medicaid reimbursement for PSS meeting certain requirements helped spur the spread of PSS, including to SUD treatment programs.³¹² The opioid epidemic, and increased federal and state funding to address it, has led to further expansion of PSS. (SAMHSA's TIP 64, *Incorporating Peer Support Into Substance Use Disorder Treatment Services*, contains more information on the history of PSS; <https://store.samhsa.gov/product/tip-64-incorporating-peer-support-substance-use-disorder-treatment-services/pep23-02-01-001>).

Peer Specialist Training and Certification

The increase in PSS has been accompanied by greater professionalization of the peer workforce. Virtually all states now offer training and certification for peer specialists. Medicaid requires such training and certification, along with supervision by a competent mental health professional (as defined by the state) as a condition of reimbursement for PSS.^{313,314} Many entities hiring peer specialists, even entities that don't bill Medicaid for PSS, make training plus certification or work toward certification a condition of employment.³¹⁵

The training required for certification varies by state, but typically includes topics like ethics, confidentiality, documentation, recovery goal setting, and office skills.³¹⁶ For more information on state training and certification requirements for peer specialists, counselors can check with their state's peer certification body. (The "State Website Data Sources" section of the Peer Recovery Center of Excellence's *Comparative Analysis of State Requirements for Peer Support Specialist Training and Certification in the United States* at <https://peerrecoverynow.org/about/coe-products.aspx> has relevant links.)



SAMHSA in 2023 published the *National Model Standards for Peer Support Certification* and began encouraging their adoption by states and state certification entities to expand certification reciprocity and strengthen the peer workforce across the United States. The standards' recommendations on the certification process and certification requirements cover such topics as training, work experience, background checks, and ethics. The model standards are available at <https://www.samhsa.gov/about-us/who-we-are/offices-centers/or/model-standards>.

Settings for PSS

An expanding range of settings now incorporate PSS as part of their menu of programs and services. In addition to recovery support settings (e.g., RCOs, recovery residences) and specialized SUD treatment settings (e.g., outpatient, inpatient, and residential treatment), they include:

- Other clinical settings (e.g., hospital EDs, primary care practices).³¹⁷
- Social service agencies and organizations (e.g., child welfare agencies, shelters).^{318,319}
- Criminal justice settings (e.g., treatment courts, pretrial release programs, parole/probation departments, prison and jail reentry programs).^{320,321,322}
- First responder agencies (e.g., police departments, EMS).³²³
- Crisis services (e.g., mobile crisis units, crisis stabilization units).³²⁴
- Education settings (e.g., collegiate and high school recovery programs).³²⁵

Role Clarity

As the peer specialist workforce has expanded and peer specialists have moved into new settings, the issue of role clarity has increasingly come up among other professionals involved in SUD treatment and recovery as well as peers themselves. Counselors working with peers need to

understand peer roles, and to avoid expecting peers to carry out activities that they aren't trained to do (such as drug testing) or that are inappropriate for their position (such as menial tasks).³²⁶ Chapter 3 provides more information on peer roles and discusses how PSS can complement counseling and extend the continuum of care for people with substance use-related problems.

TIP 64, *Incorporating Peer Support Into Substance Use Disorder Treatment Services*, has more information on peer specialists and role clarity (<https://store.samhsa.gov/product/tip-64-incorporating-peer-support-substance-use-disorder-treatment-services/pep23-02-01-001>).

Recovery Goals for Problematic Substance Use

A recovery-oriented approach to counseling accepts that recovery from problematic substance use has many pathways and works with the client's chosen recovery goal. That goal could be abstinence, controlled use (i.e., use resulting in few if any substance use-related problems), or harm reduction. (The "Harm Reduction" section in Chapter 3 discusses harm reduction strategies and benefits.) A client may even think of their recovery goal more in terms of how they want to feel, what they want to do, or how they want to grow.³²⁷

Research Findings on Recovery Goals

People who have or had a lower severity or shorter history of problematic substance use are especially likely to have reduced substance use, rather than abstinence, as their recovery goal.³²⁸ The type of substance used can affect recovery goal setting, too. Recent research indicates that more than 80 percent of people seeking treatment for AUD prefer nonabstinence goals.

By comparison, roughly 20 percent of people seeking treatment for other SUDs prefer nonabstinence goals.³²⁹ (This percentage

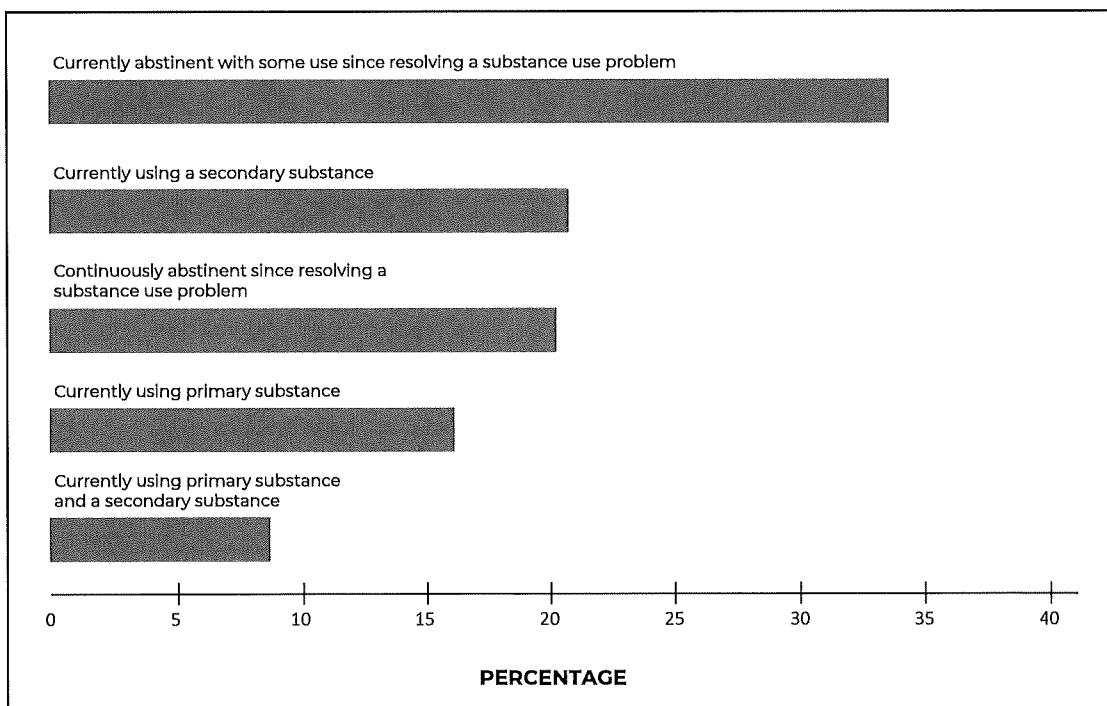
may be somewhat higher for people with cannabis use disorder seeking treatment and people with nonmedical use of prescription opioids likely to seek treatment in the near term.^{330,331}) Surveys of people in recovery also show that some consider reduced substance use, or abstinence from a drug but continued alcohol use, consistent with recovery.^{332,333} See Exhibit 1.3 for details. Recent research has demonstrated that significantly reducing substance use can improve functioning and quality of

life (although not to the same extent as abstinence), which supports a client-defined approach to recovery.^{334,335} The traditional abstinence-only model continues to dominate specialized SUD treatment and be central to many mutual-help approaches, such as 12 Step, however.³³⁶ As a result, some individuals with problematic use and nonabstinence recovery goals don't seek out or stay in treatment or mutual-help groups because of their perception or the reality that abstinence will be required.^{337,338}

EXHIBIT 1.3. Prevalence of Different Substance Use Statuses Among People In Recovery

A 2022 cross-sectional study³³⁹ looked at the prevalence of different substance use statuses among a nationally representative sample of the 22.35 million U.S. adults estimated in 2017 to have resolved a substance use problem.³⁴⁰ The 2022 study found the prevalences shown below, in descending order.

PATHWAY PREVALENCE CHART 8



Source: Adapted with permission.³⁴¹

Variability of Recovery Goals

A client who uses or used multiple substances may have a different recovery goal for each substance, or even no goal for one or more substances.³⁴² Also, a client's recovery goal may change over time.³⁴³ For example, a client with severe use who originally set controlled use as their final goal may eventually decide to make abstinence the goal. This decision may result from success—or a lack of success—with controlled use.³⁴⁴ Conversely, a client with a goal of abstinence may, after repeated recurrences, decide to make controlled or reduced use their goal.

Counselors may have legal, ethical, or programmatic considerations that prevent them from working on substance use or recovery issues with clients who have nonabstinence recovery goals,³⁴⁵ perhaps based on type of substance. A recovery-oriented approach to this situation would be for the counselor to advise the client that recovery has many pathways and to refer the client to another provider who can accept nonabstinence goals or to a program or organization that offers PSS for recovery from problematic substance use.

Pathways of Recovery

Recovery has many pathways, and it is ultimately up to clients in or seeking recovery to determine which pathway or pathways they follow.³⁴⁶ Some clients may pursue multiple approaches to recovery at the same time or for overlapping periods; some may try different approaches in sequence; and some may find a single approach that works for them and stick with it.³⁴⁷

A recovery-oriented counselor should:

- Be familiar with the main categories of pathways listed below and discussed in more detail later in this TIP.
- Support clients' choice of pathways.
- Know how to help clients learn more about any pathways that they want to explore.
- Know how to link clients to different pathways (other than natural recovery).
- When possible, keep the door open for a client in case their exploration of an alternative pathway doesn't work out.

Categories

Natural Recovery

"Natural recovery" (sometimes called unassisted recovery) refers to achieving recovery from problematic substance use through self-management. A 2017 study found an association between this pathway and having a less severe and complex substance use and mental health history.³⁴⁸ The same study found that participants who reported cannabis as their primary substance of use were more likely to achieve recovery through self-management than participants who reported other primary substances.

Clinical Approaches

These pathways comprise approaches in which an individual engages in recovery using the services of a behavioral health services professional, a medical provider, or another credentialed professional (other than a certified peer specialist), or a combination of such providers.³⁴⁹ Clinical approaches can include behavioral treatment, medication, or a combination of the two depending on the type of SUD. In this TIP, medication for SUD means Food and Drug Administration (FDA)-approved medication for OUD, AUD, or both.

Recovery Support Services

These nonclinical, typically community-based services "help people enter into and navigate systems of care, remove barriers to recovery, stay engaged in the recovery process, and live full lives in communities of their choice."³⁵⁰ Examples of recovery support services include recovery housing, RCOs, PSS, recovery cafés, and employment-based recovery supports, such as employer-sponsored programs to help employees access treatment for problematic substance use, or businesses created and staffed by

people in recovery.³⁵¹ Recovery support services are usually but not necessarily provided by fellow individuals in recovery.³⁵²

Mutual Help

This pathway involves participating in one or more of the many free, volunteer-run organizations in which members meet regularly in person or online to support each other in recovering from problematic substance use. Some follow the 12-Step abstinence-based approach pioneered by Alcoholics Anonymous® (several of which also focus on specific substances), some follow a secular non-12-Step approach, and some have a religious orientation or affiliation.³⁵³ A hyperlinked listing of mutual-help organizations is available at <https://facesandvoicesofrecovery.org/?s=mutual+aid+>.

Faith-Based Recovery Support

This pathway encompasses a range of congregation-based support services, including³⁵⁴:

- Having a member of the clergy focus on recovery.
- Developing a recovery ministry, on par with other congregational “departments,” that sponsors activities like retreats and educational sessions.
- Being a recovery-friendly house of worship.

Note that treatment programs and mutual-help groups can also be affiliated with specific congregations.³⁵⁵

Recovery as a Continuum

In the recovery field, recovery is now typically thought of as a process of change and not an endpoint. Some sources have conceptualized this process as divided into early recovery (less than 1 year), continuing (or sustained; 1 to 5 years), and stable (5-plus years).^{356,357} The DSM, 5th Edition, Text Revision (DSM-5-TR), gives the following timeframes for remission from diagnosed

SUDs: early remission (at least 3 months but less than 12 months of meeting no diagnostic criteria for SUD, except for craving) and sustained remission (12 months or longer of meeting no diagnostic criteria for SUD, except for craving).³⁵⁸ (An individual can have problematic substance use needing intervention without having a diagnosable SUD.³⁵⁹)

Counselors should use any such framework with caution, given that the relationship between time in recovery and strength of recovery can vary depending on the individual and the substance or substances of concern.

What Is Recurrence of Problematic Substance Use?

Recurrence is a return to problematic substance use after a period of resolved substance use–related problems. Many individuals in recovery experience recurrence, although doing so isn’t inevitable.

According to the 2016 Surgeon General’s report on addiction, more than 60 percent of people treated for an SUD have a recurrence within a year of being discharged from treatment—a recurrence rate that the report notes is comparable to those for other chronic diseases like diabetes and asthma.³⁶⁰ A 2018 study of U.S. adults with any prior SUDs found that the prevalence of past-year persistent or recurrent SUD was 38.1 percent.³⁶¹ By comparison, the same study put the prevalence of abstinence at 14.2 percent, asymptomatic use at 36.9 percent, and symptomatic use [did not meet full criteria for any DSM-5 SUD] at 10.9 percent.

Triggers for Recurrence

Counselors should be aware of common triggers linked to recurrence of use. These triggers can directly precede a recurrence or occur months in advance. Examples of triggers include^{362,363,364}:



- People, places, and things (such as drug paraphernalia) that a client associates with substance use.³⁶⁵
- Relationship difficulties, such as with family, friends, or a partner.
- Stressful situations.
- Cravings or urges.
- Anger, loneliness, boredom, or fatigue.
- Unaddressed mental health-related conditions.

Warning Signs of Recurrence

Warning signs of recurrence often precede triggers.^{366,367} These warning signs can be categorized as emotional, mental, and behavioral.³⁶⁸ Being aware of these warning signs can help counselors identify when clients in recovery may need more support.

Emotional signs include^{369,370}:

- Feeling shame or guilt.
- Not expressing emotions.
- Becoming socially withdrawn.
- Becoming uncommunicative, such as at mutual-help meetings.

Mental signs include^{371,372}:

- Craving substances.
- Downplaying the effects of past use or fantasizing about past use.
- Bargaining with oneself about use.
- Considering ways to control use.
- Looking for recurrence opportunities.
- Planning a recurrence.

Behavioral warning signs, which might also indicate recurrence of substance use, include³⁷³:

- Not maintaining healthy boundaries.
- Not seeking support.

- Not practicing self-care, including physical self-care like healthy sleeping³⁷⁴ and eating.
- Not going to mutual-help meetings.
- Reengaging with people, places, and things associated with past use.³⁷⁵

Evolving Views of Recurrence

Just as the concept of recovery has evolved over time, so too has the concept of recurrence. A recovery orientation views recurrence not as a failure on the part of the client, but as an indication of the need to work with the client on adjusting the treatment plan or recovery plan, or both, as applicable. (Unfortunately, some SUD treatment programs still automatically discharge clients who have a recurrence.^{376,377}) Recovery researchers also increasingly emphasize the possibility that a person in recovery can learn from a recurrence and apply this newfound knowledge to their recovery effort.³⁷⁸

Benefits of Promoting Recovery and Preventing Recurrences

The benefits of recovery may seem obvious, given the wide-ranging impact that problematic substance use can have on an individual's life. Physical health, emotional well-being, relationships, school and career achievement, financial security, law-abidingness, and spiritual health are all affected by such use.³⁷⁹ Recovery is an opportunity to make improvements in all of these domains.

The benefits of recovery extend well beyond the individuals in recovery themselves. Recovery also positively affects families, workplaces, communities, and society as a whole.

Examples of Benefits to the Individual

- Recovery contributes to overall improved health. Individuals with problematic substance use are more likely to suffer from chronic pain, hypertension, infectious diseases (e.g., hepatitis C and HIV), injuries, poisonings, overdose, and death by suicide.^{380,381}
- A landmark survey of people in recovery found that recovery from problematic substance use “is associated with dramatic improvements in all areas of life: healthier/better financial and family life, higher civic engagement, dramatic decreases in public health and safety risks, and significant increases in employment and work.”³⁸²
- A 2020 update of research published in 2017 found that U.S. employees in recovery miss 13.7 fewer days annually than employees with untreated SUD and 3.6 fewer days than an average employee.³⁹²
- Recovery may reduce instances of IPV, which has been found to correlate with substance use.³⁹³
- Recovery contributes to healthier pregnancies and infants. Substance use during pregnancy can lead to fetal alcohol spectrum disorder and neonatal abstinence syndrome.³⁹⁴

Examples of Benefits to the Community and Society

- Each year, the problematic use of drugs and alcohol costs the United States an estimated \$416 billion, which includes healthcare expenses, lost workplace productivity, criminal justice–related costs, and losses from motor vehicle crashes.^{383,384}
- Recovery can reduce hospital costs, where the medical costs related to problematic substance use are \$13.2 billion annually.³⁸⁵
- Recovery can help avoid drug overdose deaths, reported to number 100,306 from April 2020 to April 2021.³⁸⁶
- Recovery helps reduce alcohol-related driving fatalities, which occur at a rate of 1 death every 50 minutes and cost \$44 billion annually.³⁸⁷
- Treatment and recovery reduce criminal justice system costs associated with people with OUD, which a 2020 study estimated at \$29.9 billion annually.³⁸⁸ The annual cost of methadone treatment averages about \$6,550 per person,³⁸⁹ compared with an annual average cost of about \$34,000 to hold someone in a local jail³⁹⁰ or \$34,770 to incarcerate someone in a federal prison.³⁹¹

Introduction to Recovery-Oriented Systems of Care

A recovery-oriented system of care (ROSC) is an integrated, easily navigated, self-defined network of community-based services and supports that offers a menu of treatment and recovery options to people in or seeking recovery from problematic substance use. In a ROSC, these options are available across the full continuum of care, from prevention through recovery management, and for the full spectrum of substance use problems, from risky use through severe SUD.^{395,396}

A ROSC’s overarching goal is to better support people in achieving recovery, wellness, and improved quality of life by addressing their needs holistically³⁹⁷ and in the same long-term way that characterizes management of other chronic diseases, like diabetes and heart disease. Too often, people in recovery don’t receive this type of long-term support.

Exhibit 1.4 lists the essential elements of a ROSC, as identified by the 2005 National Summit on Recovery.

EXHIBIT 1.4. Essential Elements of a ROSC

- Person centered
- Inclusive of family and other ally involvement
- Individualized and comprehensive services across the lifespan
- Committed to anchoring systems in the community
- Committed to continuity of care
- Based in partner-consultant relationships
- Strengths based
- Culturally responsive
- Responsive to personal belief systems
- Committed to PSS
- Inclusive of the voices and experiences of recovering individuals and their families
- Committed to integrated services
- Committed to systemwide education and training
- Committed to ongoing outreach and checkups
- Outcomes driven
- Research based
- Adequately and flexibly financed

Source: Adapted from material in the public domain.³⁹⁸

Experience with ROSCs and a greater understanding of recovery have led to the identification of other important factors. One is that ROSCs address SDOH and health disparities. Another is that ROSCs promote community inclusion of people in recovery.^{399,400} A third, as noted by the consensus panel that supported the development of this TIP, is that ROSCs don't take a linear approach to recovery.

A small sampling of the many states and communities that have actively engaged in promoting ROSCs includes Connecticut; Illinois; New York; Ohio; Houston, Texas; Philadelphia, Pennsylvania; and Scott County, Indiana.^{401,402,403,404,405,406}

Participating in a ROSC connects counselors to other types of providers offering recovery-oriented care, which in turn can help support clients in accessing holistic, appropriate services. Chapter 2 and Chapter 5 have more information on ROSCs.

Introduction to Recovery Research: Current Topics and Needs

Because recovery is a multidimensional process, it means different things to different people, and conducting research on it can be challenging.^{407,408} Yet, recovery research is a burgeoning field of inquiry with many different topics to explore, some of which are discussed in the following sections.

Some Overarching Issues

Studying and measuring recovery is different than studying and measuring addiction, which typically looks at outcomes, such as treatment retention rates, number of days abstinent, and changes in number of heavy drinking days. Recovery research is concerned not only with these outcomes, but also with such issues as^{409,410}:

- Improvement in social connectedness.
- Improvement in personal functioning.
- The effect of time in recovery on quality of life and outlook.
- The effect of treatment entry point on recovery trajectory.
- Ways to measure the subjective experience of recovery.

Neuroscience of Recovery

As discussed earlier, imaging technology can look directly at many aspects of the brain and its activity. If these techniques can reveal the effects of substance use on the brain, can they also be used to evaluate the progress of recovery? As two researchers have observed,

a group of people may abstain from substances in a 4-week treatment program but display a wide range of behaviors afterward, from immediate recurrence through lifelong abstinence.⁴¹¹ It's possible that neuroscience could discover biomarkers or brain function patterns corresponding to these behaviors, which could "alert clinicians while treatment is still underway whether progress is being made and could help them design care packages that translate patients' short-term clinical gains into long-term recovery."⁴¹²

Below are some directions currently being pursued in the neuroscience of recovery.

Brain Structure

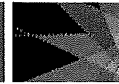
SUDs are associated with shifts in brain architecture and structure. People with AUD show reductions in gray matter,⁴¹³ and people with other SUDs have shown changes in both gray matter and white matter.⁴¹⁴ Does recovery reverse these changes? One study suggests that abstinence can cause increases in brain volume in people who used methamphetamine,⁴¹⁵ and another found a similar result among prison inmates who had regularly used alcohol, cocaine, or cannabis.⁴¹⁶ However, the second study found that these reversals varied depending on the substance. Another study of people in recovery for AUD found that 8 months after an initial magnetic resonance imaging assessment, there was no difference in brain volume between people who abstained from drinking completely and people who drank at low levels.⁴¹⁷

Further research is needed on the extent of possible gains, the differences depending on the type of SUD, and the changes associated with abstinence compared with reduction in substance use.

Functional Magnetic Resonance Imaging for Changing the Brain

Functional magnetic resonance imaging (fMRI) is being researched for direct use in treatment, in the form of **real-time fMRI neurofeedback** (rtfMRI-nf). The goal of this promising approach is to train people in recovery to self-regulate their brain activity by having them watch it and try to modify it: a process known as neuromodulation. For example, individuals are exposed to the substance that induces craving, watch in real-time how their brain reacts, and consciously try to alter the reaction to reduce their feelings of craving.

A review of rtfMRI-nf studies across several substances, including alcohol and cocaine, showed that the neuromodulation technique generally reduced cravings, although the effects varied depending on the part of the brain involved and the severity of the SUD. The authors identified several areas for further exploration, which include whether the training transfers to settings where the subject isn't able to watch the brain react, how long the training endures, and whether effectiveness varies depending on age, sex, and other sociodemographic factors.⁴¹⁸



STIMULATION TECHNIQUES: CAN THE BRAIN BE TREATED DIRECTLY FOR SUD?

Applying small electric or electromagnetic pulses to the brain, either externally or internally, is accumulating evidence of efficacy for various brain disorders. Many studies have investigated whether these types of treatments—particularly the external ones, which are noninvasive and relatively free of side effects—could help with recovery from SUD. The evidence so far is mixed, but so are the treatment protocols, including the total number of treatments, the timespan over which they're delivered, the duration of each treatment, and the intensity of the pulses being applied. The most consistent effect across all types of SUDs was reduction in craving.⁴¹⁹

The exact mechanism for the effects of these treatments is not yet clear, nor is whether they're best used by themselves or with other treatment methods.⁴²⁰ In addition to lacking consistency in regimen, existing studies suffer from small sample sizes and often don't have rigorous control groups or sufficient blinding.⁴²¹ These techniques show great promise but must be studied and refined further. These are some to watch:

- **Repetitive transcranial magnetic stimulation** consists of electromagnetic pulses applied externally through the scalp. It's been studied in connection with SUDs for alcohol, methamphetamine, cocaine,⁴²² and cannabis.⁴²³
- **Transcranial electrical stimulation (tES)** can involve either direct or alternating current, applied externally through the scalp. It has been studied for treating SUDs involving alcohol, methamphetamine, cocaine, heroin, and cannabis.⁴²⁴ FDA currently considers both forms of tES investigational, and both are in numerous clinical trials.
- **Deep brain stimulation (DBS)** works via devices implanted in the brain. A few studies have examined its usefulness for treating SUDs involving alcohol, stimulants, and opioids.⁴²⁵ Because DBS involves surgery, it does not lend itself to large, blinded trials.

Nonabstinence Approaches to Recovery

Does recovery from problematic substance use demand abstinence? For many people, the answer is yes. But a growing body of evidence suggests that a requirement for complete abstinence may be unnecessarily restrictive, and that treatment programs that demand it may discourage people from seeking help.⁴²⁶

Analyses of participants in two large studies that tracked outcomes of AUD treatment for up to 10 years, Project MATCH and the COMBINE Study,^{427,428,429} showed that a substantial number of participants returned to occasional heavy drinking after treatment. However, there was not a consistent relationship between the amount they drank and how well they functioned. Approximately half of the participants were able to drink

heavily on occasion and still maintain levels of functioning similar to participants who abstained or were considered low risk. This finding suggests focusing on function, rather than drinking practices, when defining what constitutes recovery and when projecting how someone will fare long term.

In another example, a study of people in treatment for cocaine use disorder showed that some were able to achieve "problem-free functioning," while dropping down to "occasional" use during their final month of treatment, and to maintain that status and level of use during follow-up interviews.⁴³⁰

Behavioral Economic Theory and Recovery

Behavioral economics is the study of how people make decisions about how to use their resources and things they value. It

includes such elements as how a person chooses between a smaller reward available immediately and a larger one that requires waiting, and how those decisions may be influenced by state of mind, stress level, and outside events.

One characteristic feature of SUD is distorted behavioral economics: the person who has an SUD puts a higher value on the substance than on other things normally regarded as valuable, like relationships, jobs, education, or life goals.⁴³¹ In severe cases, the substance becomes the only thing valued. An important task of recovery is reconfiguring one's behavioral economic calculations to devalue the substance and shift priorities to self-care, better relationships, and meaningful participation in society.

From the perspective of behavioral economics, the COVID-19 pandemic created a "perfect storm" for SUDs. Many rewards and incentives—such as companionship, social activity, and employment—became suddenly unavailable, while substances were readily available and the need to relieve stress, loneliness, and other negative emotions was much higher than normal.⁴³² Restricted access to recovery services further exacerbated the problems for many. Research will need to assess the long-term impact of the pandemic on the behavioral economic structures of substance use.

One current avenue of research is refining the application of behavioral economics to recovery. For example, people in recovery could be assessed at baseline to determine how they make value-based decisions in general, and reassessed periodically to see whether their decision process has changed during treatment and recovery. Their responses could help predict the likelihood of recurrence.⁴³³ (Contingency management, an SUD intervention grounded in behavioral economics, is discussed in Chapter 3.)

Recovery Timeframes

More research is needed on recovery timeframes. William White has suggested that "recovery durability" is achieved when a person has been in active, continuous recovery for 4 to 5 years.⁴³⁴ A 2018 study found that it takes an average of 15 years of recovery to achieve the same quality of life as a sample of the general population in several Western European countries.^{435,436}

This TIP's consensus panelists emphasized the lack of continuity in recovery support after treatment and the need to look at supports for people beyond the first few years of recovery. However, the consensus panelists also suggested using milestones with caution. Instead, they emphasized that recovery is an ongoing, individualized process of improving one's quality of life. (Chapter 4 has a full discussion about the pillars of recovery.)

Each person's journey will be unique and will not adhere to a strict schedule. Moreover, recovery should not be confused with "remission," the term DSM-5-TR uses to describe being free of SUD symptoms (except craving).⁴³⁷ Just because someone stops using a substance does not mean they have also resolved the problems that contributed to, or arose because of, their substance use. Nor does it mean that they have achieved a quality of life acceptable to them.

Recovery Support Services

Most recovery services have developed fairly recently and some do not readily lend themselves to quantifiable measurement in the way that many formal SUD treatment services do. But research in this area is growing.

Recovery Housing

Recovery housing provides a safe, alcohol- and illicit drug-free living space for people in recovery from SUDs. The National Alliance for Recovery Residences recognizes four levels of recovery housing. Each provides a different level of structure and services. Residences may be peer-run, monitored by a house manager or senior resident, formally supervised, or operated by a clinical service provider.⁴³⁸

Living in recovery housing has been shown to reduce residents' substance use and likelihood of recurrence and increase their likelihood of being employed.⁴³⁹ A 2022 study found that people in recovery housing stayed in outpatient treatment programs more than twice as long as people who weren't in recovery housing, and were twice as likely to have a satisfactory discharge from treatment.⁴⁴⁰

Most research to date has focused on peer-run residences.⁴⁴¹ Gaps still exist in fully understanding how the other levels of recovery housing affect recovery outcomes. Other research needs include understanding⁴⁴²:

- What types of people are most likely to benefit from living in recovery housing.
- How recovery housing environments influence the likelihood an individual will enter formal treatment.
- Which aspects of recovery residences (e.g., social support, linkages to mutual-help programs) have the greatest impact.

RCCs

RCCs are a growing part of the recovery ecosystem,⁴⁴³ serving as social "recovery hubs" that provide social opportunities, recovery coaching, recurrence prevention skills, employment and job training linkages, and other resources. Participating in an RCC is associated with increased abstinence; lowered substance-related harms; and

enhancements in recovery capital, psychological well-being, and quality of life.⁴⁴⁴ However, RCCs are fairly new and have not yet been well studied from a systematic or longitudinal perspective.⁴⁴⁵

Suggested topics for further research on RCCs include⁴⁴⁶:

- Determining whether the increases in recovery capital are sustained over time, and whether RCC users' quality of life improves as a result.
- Identifying what barriers might prevent individuals from using RCCs.
- Exploring regional variations in RCC membership, service needs and use, and overall impact.

PSS

PSS are an expanding part of the SUD continuum of care with a growing evidence base.^{447,448,449} A great deal of variation exists in the scope of peer services and in states' peer training and certification requirements. Future directions for research on peer services could include large-scale comparative studies on their overall effectiveness and their relative effectiveness in different settings.

Conclusion

This chapter has reviewed the evolving understanding and treatment of problematic substance use, discussed the principles and different pathways of recovery, and introduced some specific strategies of recovery-oriented counseling for clients with substance use-related problems. The chapter also looked back at the history of the modern recovery movement and forward to future recovery research. Finally, the chapter has emphasized that recovery-oriented counseling doesn't exist in a vacuum. Counselors working with people in recovery should be connected to peer specialists and others offering recovery-oriented services and supports, ideally through a ROSC.

Appendix A: Counseling Approaches to Promote Recovery From Problematic Substance Use and Related Issues – Module 1

Directions: To receive credits for this course, you are required to take a post test and receive a passing score. We have set a minimum standard of 80% as the passing score to assure the highest standard of knowledge retention and understanding. The test is comprised of multiple choice and/or true/false questions that will investigate your knowledge and understanding of the materials found in this CEU Matrix – The Institute for Addiction and Criminal Justice distance learning course.

After you complete your reading and review of this material, you will need to answer each of the test questions.

Submit your test via the Internet. All of our tests are posted electronically, allowing immediate test results and quicker processing. First, you may want to answer your post test questions using the answer sheet found at the end of this appendix. Then, return to your browser and go to the Student Center located at:

<http://www.ceumatrix.com/studentcenter>

Once there, log in as a Returning Customer using your Email Address and Password. Then click on 'Take Exam' and you will be presented with the electronic exam.

To take the exam, simply select from the choices of "a" through "e" for each multiple choice question. For true/false questions, select either "a" for true, or "b" for false. Once you are done, simply click on the submit button at the bottom of the page. Your exam will be graded and you will receive your results immediately. If your score is 80% or greater you will have access to the Certificate of Completion. This is the final step in the process, and you may save and/or print your Certificate of Completion.

If, however, you do not achieve a passing score of at least 80%, you will need to review the course material and return to the Student Center to resubmit your answers.

If you have any difficulty with this process, or need assistance, please e-mail us at ceumatrix@ceumatrix.com and ask for help.

Answer the following questions by selecting the most appropriate response.

Quiz

1. What can help counselors support clients affected by historical, racial, and intergenerational trauma?

- A. Awareness of trauma**
- B. Ignoring the trauma**
- C. Avoiding cultural sensitivity**
- D. Using only medication**

2. Which group reports exposure to trauma more frequently than cisgender and heterosexual individuals?

- A. LGBTQI+ individuals**
- B. Cisgender individuals**
- C. Heterosexual individuals**
- D. Children**

3. What does the USPSTF recommend for primary care practices regarding substance use disorders (SUDs)?

- A. Screen all adults for SUDs**
- B. Ignore SUDs**
- C. Only screen children**
- D. Screen only high-risk individuals**

4. What is a key principle of recovery according to the document?

- A. Recovery is based on respect**
- B. Recovery is only about abstinence**
- C. Recovery ignores trauma**
- D. Recovery is solely individualistic**

5. What can telehealth provide for individuals seeking substance use disorder treatment?

- A. Increased access to care**
- B. Less privacy**
- C. Higher costs**
- D. Limited treatment options**

6. Individuals identifying as LGBTQI+ are less likely to be exposed to minority stress compared to heterosexual individuals.

- True**
- False**

7. The connection between trauma and epigenetics is an important area of ongoing research.

True

False

8. Recovery is solely based on individual strengths and does not involve community support.

True

False

9. Telehealth can expand access to SUD care for people who feel stigmatized seeking treatment.

True

False

10. Racism and discrimination can increase vulnerability to problematic substance use.

True

False

11. What type of stress are LGBTQ+ individuals more likely to be exposed to?

A. Minority stress

B. Financial stress

C. Work-related stress

D. Environmental stress

12. What does the USPSTF recommend for primary care practices regarding substance use disorders (SUDs)?

A. Screen all adults for SUDs

B. Only screen children

C. Ignore SUDs

D. Screen only high-risk individuals

13. What is one benefit of recovery mentioned in the document?

A. Improved physical health

B. Increased substance use

C. Isolation from community

D. Financial instability

14. What is a key area of ongoing research related to trauma?

A. Epigenetics

B. Nutrition

C. Exercise

D. Sleep patterns

15. What can telehealth expand access to?

- A. Substance use disorder care**
- B. Physical therapy**
- C. Surgical procedures**
- D. Emergency care**

16. Experiencing trauma can lead to lasting adverse effects on a person's well-being.

- True**
- False**

17. The document states that all individuals with substance use problems have a history of trauma.

- True**
- False**

18. Recovery from substance use-related problems is a highly individualized journey.

- True**
- False**

19. The USPSTF recommends that primary care practices screen all adults for substance use disorders.

- True**
- False**

20. Telehealth can limit access to substance use disorder care for individuals who feel stigmatized.

- True**
- False**

21. What is a significant factor that affects health outcomes for LGBTQI+ individuals according to the document?

- A. Minority stress**
- B. Genetic predisposition**
- C. Dietary habits**
- D. Exercise frequency**

22. What does the document suggest about the relationship between trauma and epigenetics?

Counseling Approaches to Promote Recovery From Problematic Substance Use and Related
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- A. Trauma can be passed down through epigenetic mechanisms**
- B. Epigenetics has no relation to trauma**
- C. Trauma only affects the individual**
- D. Epigenetics is unrelated to health**

23. What is one benefit of integrating primary care with behavioral health services?

- A. Reduces health disparities**
- B. Increases treatment wait times**
- C. Limits patient confidentiality**
- D. Separates physical and mental health**

24. According to the document, what is a key principle of recovery?

- A. Recovery is culturally based**
- B. Recovery is only about abstinence**
- C. Recovery ignores social networks**
- D. Recovery is solely individualistic**

25. What is one of the roles of telehealth in substance use disorder treatment?

- A. Expands access to care**
- B. Increases stigma**
- C. Limits treatment options**
- D. Requires in-person visit**

26. Does the document suggest that adverse childhood experiences (ACEs) can affect brain development and lead to problematic substance use later in life?

- True**
- False**

27. According to the document, medication-assisted treatment for opioid use disorder (OUD) can only be provided by specialized clinics.

- True**
- False**

28. The document states that recovery is solely an individual process and does not involve family or community support.

- True**
- False**

29. The document indicates that telehealth can be beneficial for individuals who have difficulty accessing traditional treatment due to transportation issues.

- True**
- False**

30. According to the document, the experience of discrimination has no impact on the likelihood of initiating substance use.

True

False

31. What is one of the negative effects of minority stress on LGBTQI+ individuals?

- A. Improved health outcomes**
- B. Increased substance use**
- C. Enhanced coping behaviors**
- D. Decreased exposure to trauma**

32. What is a key area of ongoing research mentioned in the document?

- A. The impact of diet on recovery**
- B. The connection between trauma and epigenetics**
- C. The effectiveness of telehealth**
- D. The role of exercise in substance use recovery**

33. What does the document suggest about the integration of primary care and behavioral health services?

- A. It is unnecessary for effective treatment**
- B. It can reduce health disparities**
- C. It complicates patient care**
- D. It is only beneficial for mental health**

34. According to the document, what is a principle of recovery?

- A. Recovery is based on individual strengths**
- B. Recovery is only about abstaining from substances**
- C. Recovery does not involve social networks**
- D. Recovery is a quick process**

35. What is one benefit of telehealth in substance use disorder treatment?

- A. It limits access to care**
- B. It requires in-person visits**
- C. It expands access for stigmatized individuals**
- D. It is less effective than in-person treatment**

Counseling Approaches to Promote Recovery From Problematic Substance Use and Related
Issues – Module 1

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| 2. [A] [B] [C] [D] [E] | 17. [A] [B] [C] [D] [E] | 32. [A] [B] [C] [D] [E] |
| 3. [A] [B] [C] [D] [E] | 18. [A] [B] [C] [D] [E] | 33. [A] [B] [C] [D] [E] |
| 4. [A] [B] [C] [D] [E] | 19. [A] [B] [C] [D] [E] | 34. [A] [B] [C] [D] [E] |
| 5. [A] [B] [C] [D] [E] | 20. [A] [B] [C] [D] [E] | 35. [A] [B] [C] [D] [E] |
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| 15. [A] [B] [C] [D] [E] | 30. [A] [B] [C] [D] [E] | |