Evidence-Based Treatment of Young Adults With Substance Use Disorders

Scott E. Hadland, MD, MPH, MS, Amy M. Yule, MD, Sharon J. Levy, MD, MPH, Eliza Hallett, MS, Michael Silverstein, MD, MPH, Sarah M. Bagley, MD, MS

abstract

In summarizing the proceedings of a longitudinal meeting of experts in substance use disorders (SUDs) among adolescents and young adults, in this special article, we review principles of care related to SUD treatment of young adults. SUDs are most commonly diagnosed during young adulthood, but most of the evidence guiding the treatment of this population has been obtained from older adult study participants. Extrapolating evidence from older populations, the expert group asserted the following principles for SUD treatment:

1. It is important that clinicians who work with young adults effectively identify and address SUD to avert long-term addiction and its associated adverse health outcomes. Young adults receiving addiction treatment should have access to a broad range of evidence-based assessment, psychosocial and pharmacologic treatments, harm reduction interventions, and recovery services. These evidence-based approaches should be tailored to young adults’ needs and provided in the least restrictive environment possible. Young adults should enter care voluntarily; civil commitment to treatment should be a last resort. In many settings, compulsory treatment does not use evidence-based approaches; thus, when treatment is involuntary, it should reflect recognized standards of care. Continuous engagement with young adults, particularly during periods of relapse, should be considered a goal of treatment and can be supported by care that is patient-centered and focused on the young adult’s goals. Lastly, substance use treatments for young adults should be held to the same evidence and quality standards as those for other chronic health conditions.
The continuum of care for young adults with substance use disorders (SUDs) is fragmented. Clinicians in traditional medical settings frequently lack the training and comfort to conduct comprehensive assessments of young adults with SUDs and ensure that young adults receive developmentally appropriate, evidence-based treatment, including pharmacotherapy for opioid use disorder (OUD). Thus, diagnosis and treatment are often delayed.

Young adults who do receive treatment commonly do so at a dedicated addiction treatment facility, often operating outside the mainstream medical system, where they may not receive standard-of-care pharmacotherapy and, frequently, receive care alongside older adults, with little consideration of their unique developmental needs. Such treatment is commonly coerced or court mandated, without the explicit consent of the young adult. For these reasons, among others, treatment of young adults is commonly marked by poor outcomes, loss to follow-up, and low quality.1–3

Despite this suboptimal practice landscape, data from clinical trials and observational studies (Table 1) as well as expert consensus provide a clearer picture of how an effective continuum of care for young adults with SUDs should look. The principles described here, derived from a panel of experts convened by Boston Medical Center’s Grayken Center for Addiction, emphasize early intervention for young adults with SUD, comprehensive and tailored services, access to pharmacotherapy when indicated, voluntary entry into treatment, continuous engagement, and assurance of quality of care. The recommendations in this article are not American Academy of Pediatrics policy, and publication herein does not imply endorsement.

PRINCIPLES OF CARE

Principle 1: Young Adults Should Be Offered Access to Care and Services as Soon as Needs Are Identified

Guidance

The workgroup concluded that SUDs should be addressed as soon as they are detected by ensuring efficient access to evidence-based treatment and support services. Left untreated, SUDs for many individuals worsen, resulting in cumulative, lifelong harms. The workgroup felt that intervening with young adults early in the development of SUD is critical, not only because it can avert worsening addiction, but also because intervening later in the life course, after an individual has a longer history of substance use, is far more difficult.12

The workgroup noted the importance of ensuring that the full complement of evidence-based services is offered immediately. Certain evidence-based practices (in particular, pharmacotherapy) are sometimes delayed while a young adult receives nonpharmacologic treatment, such as psychotherapy. In these cases, pharmacotherapy may only be offered after initial treatment attempts have been unsuccessful. The workgroup felt that offering a pharmacologic standard-of-care treatment immediately on detection of SUD (when applicable to the substance[s] being used) is important to optimize outcomes.

Evidence

More than 9 in 10 individuals receiving treatment of SUD report that their first use of substances occurred by young adulthood.13 Often, alcohol or marijuana is the first substance that a young person uses. It is common, furthermore, for clinicians to avoid addressing alcohol or cannabis use in certain populations (eg, college students) when use of these substances is common.14 Alcohol and drug use, however, is associated with acute consequences, including motor vehicle crashes and other injuries, sexual assault, and mental health problems that can occur even among individuals who do not meet criteria for an SUD.15,16 It is critical that clinicians working with young adults identify and address substance use as early as possible because, left untreated, more severe disorders and harm can result.17,18 Waiting to determine if an SUD self-resolves represents a missed opportunity to intervene early.

Even when problematic substance use is recognized, clinicians may delay providing the full complement of addiction services. Most young adults with OUD, for example, receive psychotherapy without pharmacotherapy, one of the single most effective interventions.3,5 In some cases, clinicians delay pharmacotherapy while determining if behavioral health services alone are sufficient.19–21 Such delays, however, may place young adults at risk for developing a more severe SUD or experiencing drug use–related harm.

Practice Considerations

There are numerous barriers to identification and early intervention for SUD among young adults. First, addiction services have long been delivered outside traditional health care settings, and many clinicians have not received training on how to effectively screen and address substance use.21,22 Second, young adults may be ambivalent about receiving SUD treatment and decline services.23,24 Third, even when clinicians offer SUD care, young adults only receive services if they present for care. Young adults have among the lowest rate of participation in routine health care of any age group.24,25 Addressing these numerous challenges will require widespread clinician training on evidence-based
### TABLE 1 Summary of Selected Studies Reviewed by Expert Panel (Studies Listed Alphabetically)

<table>
<thead>
<tr>
<th>Author and Year</th>
<th>Sample</th>
<th>Setting</th>
<th>Study Period</th>
<th>Design</th>
<th>Outcome</th>
<th>Main Findings</th>
<th>Contribution to Summit Principles</th>
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<tbody>
<tr>
<td>Chadi et al.2019</td>
<td>N = 81,144 youth ages 10–22 y and continuously enrolled in Medicaid for at least 6 mo diagnosed with NUD</td>
<td>Insurance claims data from 11 states enrolled in Medicaid</td>
<td>January 2014 to June 2015</td>
<td>Retrospective cohort study to compare youth who received treatment with those who did not</td>
<td>Receipt of treatment (counseling for NUD, varenicline, or sustained-release bupropion) within 6 mo of NUD diagnosis</td>
<td>There was low receipt (5.5%) of treatment of NUD among youth enrolled in Medicaid. Among youth with NUD receiving treatment, older age and co-occurring mental health and SUD were associated with receipt of pharmacotherapy.</td>
<td>Identifies gaps in the provision of any treatment of NUD among young adults, and, in particular, gaps in the provision of pharmacotherapy for NUD. Suggests substantial area for improvement in the treatment of NUD among young adults.</td>
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<tr>
<td>Hadland et al.2017</td>
<td>N = 20,822 youth ages 15–25 y diagnosed with OUD</td>
<td>Health insurance claims data from all 50 states enrolled in a large US commercial health insurer</td>
<td>January 2001 to December 2014</td>
<td>Retrospective cohort study to compare youth who received medications for OUD with those who did not</td>
<td>Dispensing of medication (buprenorphine or naltrexone) within 6 mo of first OUD diagnosis</td>
<td>Suggests substantial area for improvement in the treatment of OUD among young adults. Datasuggest that retention in care may be improved with the use of medications.</td>
<td>Reveals the likely role of IDT and other treatment modalities in supporting retention in care among young adults. Data suggest that retention in care may be improved with the use of medications.</td>
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<tr>
<td>Hadland et al.2018</td>
<td>N = 4,857 youth ages 15–22 y diagnosed with OUD</td>
<td>Health insurance claims data from 11 states enrolled in Medicaid</td>
<td>January 2014 to December 2015</td>
<td>Retrospective cohort study to compare youth who received any treatment (including medications for OUD and/or behavioral therapy)</td>
<td>Retention in care, with attention defined as ≥80% without any treatment-related claims</td>
<td>Youth who received buprenorphine, naltrexone, or methadone were more likely to receive medication than older, male, and non-Hispanic white youth, respectively.</td>
<td>Reveals the likely role of pharmacotherapy for OUD in supporting retention in care among young adults. Data suggest that retention in care may be improved with the use of medications.</td>
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<tr>
<td>Marsch et al.2016</td>
<td>N = 53 youth ages 16–24 y who met DSM-IV criteria for opioid dependence</td>
<td>New York City, New York</td>
<td>2005–2010</td>
<td>Multicenter randomized controlled trial, double-blind and placebo controlled to compare duration of taper off buprenorphine (56 vs 28 d) after withdrawal treatment</td>
<td>Opioid abstinence and treatment retention</td>
<td>Individuals with a 56-d buprenorphine taper had a significantly higher percentage of opioid-negative urine test results (55% vs 17%; P = .03) and were retained in treatment significantly longer (37.5 vs 26.4 d; P = .027) than individuals with a 28-d buprenorphine taper.</td>
<td>One of the only youth-focused trials to date. The sample was composed mostly of young adults and revealed superiority of maintenance buprenorphine given over 4 wk, compared to 2 wk, suggesting better outcomes with longer buprenorphine treatment. Additionally, a higher frequency of visits was associated with poorer treatment outcomes.</td>
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<tr>
<td>Rafful et al.2018</td>
<td>N = 671 individuals who inject drugs</td>
<td>Tijuana, Mexico</td>
<td>March 2011 to July 2017</td>
<td>Longitudinal cohort study comparing individuals who received IDT to those who did not</td>
<td>Reported nonfatal overdose event in the past 6 mo</td>
<td>IDT significantly increased the odds of reporting a nonfatal overdose event (aOR: 1.76; 95% CI: 1.04–2.96).</td>
<td>Similar to the findings of the systematic review by Werb et al., it suggests that compulsory treatment may be associated with harm.</td>
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<tr>
<td>Sordo et al.2017</td>
<td>N = 138,716 individuals with OUD</td>
<td>19 prospective or retrospective cohort studies that published until</td>
<td>Systematic review and meta-analysis comparing individuals who received</td>
<td>Risk for all cause and overdose mortality during and after</td>
<td>Retention in methadone and buprenorphine treatment was associated with substantial</td>
<td>Compiling data across numerous studies, highlights that maintaining young adults in</td>
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<td>Wakeman et al10</td>
<td>N = 2706 adult primary care patients (1353 matched pairs from practices with and without integrated addiction treatment)</td>
<td>Boston, Massachusetts</td>
<td>November 2014 to December 2015</td>
<td>Retrospective cohort study comparing individuals who received integrated primary care–based addiction treatment (medications for OUD and recovery coaching) to those who did not</td>
<td>Inpatient admissions, hospital bed days, ED visits, primary care visits</td>
<td>The intervention group had fewer inpatient days (997 vs 1096 d, with a mean difference of 7.3 d per 100 patients; ( P = .03 )) and a lower number of ED visits (36.2 vs 42.9 visits per 100 patients; ( P = .005 )) than matched patients without pharmacotherapy and recovery coaching.</td>
<td>Describes the experience of a hospital system that has been able to provide comprehensive outpatient care to individuals with SUDs and some of the associated benefits, including shorter hospitalization and fewer ED visits.</td>
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<tr>
<td>Werb et al8</td>
<td>N = 10 699 individuals with SUDs</td>
<td>9 peer-reviewed scientific studies presenting original data assessing outcomes of compulsory treatment</td>
<td>Studies published until July 2015</td>
<td>Systematic review comparing those who received compulsory drug treatment to those who did not</td>
<td>Posttreatment drug use, criminal recidivism</td>
<td>In the majority of studies (78%), researchers did not detect any significant positive impacts of compulsory treatment on drug use or criminal recidivism, with the authors of some studies suggesting potential harms.</td>
<td>Highlights that compulsory treatment, although commonly pursued, is not associated with improved treatment outcomes and, in fact, may be harmful.</td>
</tr>
<tr>
<td>Woody et al11</td>
<td>N = 152 youth ages 15–21 y who met DSM-IV criteria for opioid dependence and sought outpatient treatment</td>
<td>6 community program sites in New Mexico (2), Delaware, Maine, Maryland, and North Carolina</td>
<td>July 2003 to December 2006</td>
<td>Randomized controlled clinical trial comparing 12 wk of buprenorphine treatment to detoxification with buprenorphine over 14 d</td>
<td>Opioid-positive urine test results at weeks 4, 8, and 12</td>
<td>Individuals in the detox group (14-d taper) had higher proportions of opioid-positive urine test results compared with individuals in the 12 wk buprenorphine-naloxone group at weeks 4 (( P &lt; .001 )) and 8 (( P = .01 )), but not at week 12 (( P = .18 )).</td>
<td>One of the only youth-focused trials to date. The sample is composed mostly of young adults and revealed the inferiority of maintenance buprenorphine over detox only over 2 mo.</td>
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\( \text{aOR, adjusted odds ratio; CI, confidence interval; DSM-IV, Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition; ED, emergency department; IDT, involuntary drug treatment; NUD, nicotine use disorder.} \)
treatments for young adults and health-system improvements to support addiction care and improve outreach, engagement, and retention in care.

**Principle 2: Young Adults Should Have Access to a Comprehensive Set of Assessment, Psychosocial and Pharmacologic Treatment, Harm Reduction, and Recovery Services Supported by Evidence**

**Guidance**

The workgroup asserted that young adults with a potential SUD should undergo a broad medical, mental health, and psychosocial assessment. Recommended components include a medical history; a physical examination; relevant laboratory testing (eg, studies for the sequelae of SUD, such as a comprehensive metabolic panel in the setting of an alcohol use disorder, and testing for sexually transmitted and blood-borne infections, including HIV); assessment for psychiatric disorders, other SUDs, and tobacco use; and contraception and HIV preexposure prophylaxis.

Ascertaining the young adult’s goals for care, previous treatment experiences, family and other supports, education, employment, and prosocial activities may also help to individualize treatment.

The workgroup clarified that young adults with opioid, alcohol, and tobacco use disorders should uniformly be offered US Food and Drug Administration–approved medications to address cravings and withdrawal. Options include buprenorphine, methadone, and naltrexone for OUD; naltrexone, acamprosate, and disulfiram for alcohol use disorder; and varenicline, bupropion, and nicotine replacement therapy for nicotine use disorder.

All young adults with SUD (regardless of readiness for treatment) can benefit from harm reduction services. Overdose education should include naloxone provision to all patients who use opioids and their family members. Additionally, the workgroup highlighted that support services (such as that offered by a recovery coach) can be layered onto treatment to promote recovery, support achievement of educational and employment goals, and resume prosocial and other recreational activities.

**Evidence**

Providing comprehensive treatment of young adults with SUD improves outcomes. An initial, scoping assessment to identify young adults’ medical, mental health, and psychosocial needs can help clinicians deliver the full range of services needed. Traditionally, substance use treatment has been focused on achieving abstinence from all substances and, in many settings, has relied heavily, if not exclusively, on behavioral therapy and peer support through mutual help (ie, 12-step) organizations, such as Alcoholics Anonymous and Narcotics Anonymous, to attain this goal. For opioid, alcohol, and nicotine use disorders, evidence-based medications exist, but young adults infrequently receive this treatment. Recent studies indicate that only ~1 in 4 young adults receives a medication for OUD, and only 1 in 73 young adults receives a medication for nicotine use disorder. Medications reduce substance use and cravings, enhance retention in care, and, in some cases, reduce mortality. The decision to initiate pharmacotherapy is, ideally, based on patient preferences after counseling from clinicians on the benefits and risks. Providing accurate information is paramount because young adults may receive inaccurate information or stigmatizing messaging regarding pharmacotherapy from family, friends, and other individuals.

Receipt of medications should not be contingent on whether a young adult is engaged with psychosocial treatment; although a comprehensive treatment approach is optimal, data suggest that outcomes may be improved with pharmacotherapy alone.

The evidence for harm reduction and recovery support services is reviewed elsewhere in this series (see accompanying articles by Kimmel et al and Xuan et al, respectively).

**Practice Considerations**

Establishing comprehensive services in many settings is difficult. Many specialty addiction treatment settings, particularly those not routinely staffed by a medical clinician, are not equipped to conduct a full medical and psychiatric assessment. Many traditional medical offices are well poised to perform a medical and psychiatric assessment, but clinicians may lack experience caring for young adults with SUDs.

Improving access to pharmacotherapy for youth is hampered by numerous barriers. First, many treatment programs have policies that preclude the use of pharmacotherapy, and some even deny entry to young adults who take medications prescribed elsewhere. Of 11 532 national treatment programs for OUD that treat young adults, 52% do not accept individuals on pharmacotherapy.

Second, there is a national shortage of clinicians to prescribe medications. This is particularly true for buprenorphine, an effective OUD medication that requires completing extensive mandatory education (8 hours of training for physicians and 24 hours of training for nurse practitioners and physician assistants) for a waiver to prescribe. Even still, medications that do not require extensive training, such as those for alcohol use disorder.
and nicotine use disorder, are only infrequently prescribed,47,48 thus highlighting additional barriers, including clinician unease or unfamiliarity with pharmacotherapy for SUD treatment.

Third, there is widespread stigma surrounding the use of medications for SUD treatment. Many young adults receive messaging that they are not truly in recovery if they are on pharmacotherapy, particularly when receiving an agonist treatment, such as methadone or buprenorphine to treat OUD.37 Often, this messaging comes from trusted adults in the young person’s life, such as treatment providers, mutual support group members, other individuals in recovery, parents, family members, or friends.

To address workforce limitations, health systems can ensure that clinicians receive the training and resources necessary to establish comprehensive addiction treatment, harm reduction, and recovery support services or; at a minimum, ensure that local referrals are available that are youth friendly. Integrating allied health professionals such as social workers into primary care settings allows practices to offer on-site counseling, case management, and referrals to community recovery support services.

Health care systems should consider eliminating rules that restrict young adults from receiving pharmacotherapy, and clinicians should receive training to become buprenorphine waivered and improve their familiarity with other medications for addiction treatment. National resources are available. For example, the Prescribers Clinical Support System (https://pcssnow.org/) provides free training. Offering medications in primary care, promoting the medical model of addiction (as opposed to narratives that portray addiction as a moral failing), and highlighting the pathophysiological rationale for pharmacotherapy may help to reduce stigma and correct common misperceptions among young adults and their families.

**Practice Considerations**

Providing care in minimally restrictive settings hinges largely on the availability of outpatient treatment options for young adults. In many regions of the United States, the only available addiction treatment program is an inpatient or residential facility.44 Patients, families, and clinicians alike may believe that addiction treatment requires hospitalization (detox) or a 30-day residential program, yet many young adults can be safely treated in an outpatient setting.49 For families with a young adult unwilling to receive addiction care, some states allow involuntary commitment to treatment, although compulsory admission to a highly restrictive environment is not without risks.

High-quality outpatient addiction treatment programs with minimally restrictive environments are needed in every community. Health care providers serving young adults can strive to expand the services offered within their practices and, also, advocate for the creation of specialty programs for the most complex patients. Outpatient delivery of care, even for young adults with a complex presentation, can be supported through numerous newly available addiction treatment and clinician education services, including telemedicine and telepsychiatry, hub-and-spokes referral systems, and Project Extension for Community Healthcare Outcomes, as several examples.51,52
Principle 4: To Maximize Engagement, Young Adults Should Enter Care Voluntarily; External Leverage Should Be Used Strategically, but Involuntary Commitment Should Be a Last Resort and, When Used, It Must Be as Good as or Better Than Noncoercive Care

Guidance

The workgroup acknowledged that young adults with active SUD who are not willing or able to engage in treatment pose a challenge for families. In such cases, the workgroup highlighted that external leverage (such as offering conditional support for education or living expenses) can be used strategically to help the young person reduce their substance use and enter treatment.

Civil commitment, in jurisdictions where it is legal, was not recommended by the workgroup, which noted that it should be used only in the most extreme of circumstances (eg, clear, imminent danger to self). Even then, families should be aware that involuntary treatment may be associated with adverse outcomes, such as subsequent overdose. When civil commitment to addiction treatment occurs, it is paramount that the care young adults receive be evidence-based to prevent harm associated with compulsory treatment.

Evidence

Involuntary commitment to addiction treatment is not associated with improved treatment outcomes8; in fact, involuntary commitment may be associated with increased risk of overdose.7 The majority of US states have statutory provisions allowing civil commitment of individuals with SUD.53 It is commonly a family member (often a parent, in the case of a young adult with SUD) who initiates the process of civil commitment and, in most states, must demonstrate that the individual with the SUD exhibits a danger to self or to others. The duration of compulsory treatment varies widely across states, with some states allowing up to 1 month and others allowing up to 1 year or longer.

Although some may view involuntary commitment as an important way to compel a young adult with a SUD into treatment, there are reasons to be concerned about this approach. In some states, individuals who are committed are placed in jail settings where their autonomy and civil liberties are limited.54 In these settings, young adults are often housed with older individuals, often including those with more severe SUD. Critically, state laws generally do not specify that evidence-based treatment must be provided in mandatory treatment facilities, and pharmacotherapy is often withheld, placing individuals with SUD (particularly those with OUD) at an elevated risk for relapse and overdose after discharge.7,50 Further considerations regarding involuntary commitment are discussed elsewhere in this series (see the accompanying article by Perker and Chester55).

Practice Considerations

Ensuring access to high-quality outpatient services for young adults with SUDs at all stages of readiness to change can mitigate the need for involuntary treatment. Offering comprehensive medical, mental health, and harm reduction services can help engage young adults in care, even if reducing substance use is not an explicit goal, and gives young adults a place to turn when they do decide to seek addiction treatment. The perceived need for compulsory treatment reflects the poor availability of services for young adults not ready to seek addiction care.19 Young adults often view addiction treatment as punitive or requiring abstinence (and indeed, many treatment programs have such a requirement56) and, therefore, are unwilling to seek care.24 Family members often feel as though they are powerless to compel young adults into treatment without judicial support.

Evidence-based engagement strategies can help family members support young adults with SUDs who are otherwise not ready or able to seek treatment. One commonly used engagement approach, Community Reinforcement and Family Training,57 capitalizes on rewards and negative consequences of substance use to influence the motivation of individuals with SUD to enter treatment. Notably, the young adult makes the ultimate decision about entering treatment. Further details on family-based interventions are discussed elsewhere in this series (see the accompanying article by Bagley et al58).

Principle 5: A Goal of Care Should Be Continuous Engagement, Including During Periods of Relapse

Guidance

The workgroup asserted that goals of care for young adults with addiction are broad, extending well beyond substance use reduction. Continuous engagement and retention in care are themselves a goal of caring for young adults with SUDs. By broadening treatment to include comprehensive medical, mental health, harm reduction services, and family-based treatments, providers can ensure that young adults have numerous incentives to continue receiving care, even during periods of relapse. Critically, many individuals disengage from care when they relapse, precisely the time that they might most benefit from clinical support. The workgroup concluded that when young adults relapse, outreach with a goal of engagement should become a priority because many patients are lost to follow-up during times of relapse and are at elevated risk of overdose and other harm.

To help support ongoing engagement and retention in care, the workgroup recommended considering integrating recovery coaches into
addiction treatment services. Recovery coaches are individuals with lived history of SUD who can provide outreach to young adults with SUDs, recovery support, and assistance with navigating systems (including health care, housing, legal, and social services). The role of recovery supports in addiction treatment is discussed elsewhere in this series (see accompanying article by Xuan et al).  

**Evidence**

Individuals retained in SUD treatment are less likely to experience early death, compared with those out of care. Continuous engagement to keep young adults in treatment, especially during high-risk times of relapse, offers an opportunity to reduce mortality and other substance use–related harm. Evidence-based services that can be provided during times of relapse include motivational enhancement to reduce or eliminate substance use, screening and treatment of sexually transmitted and blood-borne infections, and overdose education and naloxone provision, among other harm reduction and recovery support services. Supplementing services with recovery coaching is associated with enhanced retention in the care of individuals with SUD and reduced emergency department use.

**Practice Considerations**

Changing the goals of addiction treatment to encompass a broader set of patient-centered objectives will require a substantial culture shift in many addiction treatment programs. In particular, the requirement for abstinence (which may be incompatible with engaging and retaining many young adults in treatment) is common in many traditional treatment settings and potentially detrimental. Abstinence-only policies may drive young adults who are unable to cease all substance to be discharged; after such experiences, young adults may come to perceive that there are no services suitable to their needs. Health systems might consider eliminating requirements that youth cease substance use altogether and instead promote continuous engagement by offering the full spectrum of comprehensive patient-centered services focused on the young adult's goals for care regardless of their ability to stop or reduce substance use.

**Principle 6: Substance Use Care Should Be Held to the Same Evidence and Quality Improvement Standards as Those Expected in Other Areas of Medical Care for Other Chronic Health Conditions**

**Guidance**

The workgroup concluded that, on the basis of the available evidence, clinicians and health systems should develop quality measures (including structure, process, and outcome measures) for young adult–focused interventions. In many cases, quality measures will be the same for individuals of all ages receiving addiction treatment; however, special attention should be paid to the ways in which such measures are developmentally appropriate for young adults.

The workgroup also recommended that clinicians and health systems establish methods and incentives to implement and sustain interventions in routine clinical practice. Training on interventions, measures, and quality improvement methodology is needed to support primary care clinicians and addiction specialists alike. Incentives for providers should be aligned with quality improvement to ensure implementation and sustainability.

To support quality improvement, the workgroup highlighted that researchers, public health practitioners, and policymakers will need to establish a research agenda to extend the evidence base on the effectiveness of young adult–focused interventions. Particularly important is developing an understanding of the key elements of an intervention that drive its effectiveness. As the body of evidence for young adult interventions grows, it should be systematically reviewed to inform clinical guidelines.

**Evidence**

Care for a multitude of health conditions has been enhanced through attention to evidence-based principles of care and quality improvement methodologies targeting those principles. Addiction treatment, however, has lagged behind. Despite a clear blueprint from the National Academy of Medicine for improving addiction treatment that applies the well-established Quality Chasm approach, the quality of care for SUDs remains poor in many settings.

Numerous organizations have developed comprehensive strategies and performance measures to improve quality in substance use treatment, although many such strategies were developed with older populations of individuals with SUD in mind. Nonetheless, quality improvement has been successfully applied to the prevention, early detection, and treatment of other youth behavioral health conditions, such as depression. Such interventions are associated with greater engagement in counseling, improved symptoms and quality of life, and higher patient satisfaction. Elements common to a successful behavioral health quality improvement intervention include primary care–based management, a collaborative care approach involving an interdisciplinary team, and continuous patient engagement, all of which are principles readily applied to addiction care.
Practice Considerations

Lack of quality improvement in SUD care is in part attributable to the long-standing segregation of addiction treatment from general medical care, in which quality improvement is increasingly required.⁶⁶ As clinicians and health systems work to incorporate addiction care into traditional medical settings, quality improvement is likely to follow.

Clinicians and health systems should be aware that addiction quality improvement is currently hampered by a lack of evidence-based substance use-related measures or, in some cases, differing definitions for measures.⁶⁶,⁷¹ These gaps are likely even more substantial in addiction treatment of young adults, who are likely to have a unique set of developmentally appropriate outcomes and for whom traditional measures of initiation, engagement, and retention in care are likely to require different definitions for individuals ambivalent about receiving treatment. Thus, clinicians and health systems are likely to need to develop their own young adult-specific, substance use-related quality measures, continually reassess them, and adapt them to evolving national standards.

In settings where quality measures have already been adopted, there is often insufficient infrastructure to assess, analyze, report, improve, and incentivize outcomes.⁶⁶ It is critical that health systems and payers partner together to provide the education and financial support needed for clinicians to incorporate quality improvement into routine addiction care for young adults.

CONCLUSIONS

Effective addiction treatment of young adults has been hampered by insufficient evidence, poor quality of care, inadequate clinician training, siloed systems, punitive approaches, and the view that relapse is a failure rather than hallmark of a chronic illness. The principles in this document should serve as a roadmap for addressing these numerous limitations. There is much work to do to upend the status quo, but, in the face of the unprecedented morbidity and mortality attributable to young adult substance use, action is now more urgent than ever.

ACKNOWLEDGMENTS

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ABBREVIATIONS

OUD: opioid use disorder
SUD: substance use disorder

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