Frequently Asked Questions for Child, Adolescent, and Adult Psychiatrists and Other Professionals Working with Transitional Age Youth with Substance Use Disorders

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Introduction:

The transition from adolescent to young adulthood brings challenges for all youth, and particularly so for those with substance use disorders (SUDs) and other behavioral health challenges. In writing this document, our interest is in a systems of care (SOC) perspective on treatment of Transitional Age Youth (TAY) who are experiencing SUDs. SOC principles stipulate the goal of developing a "comprehensive spectrum of services organized into a coordinated network to meet the multiple changing needs" of youth and families and that services be family-driven and youth-guided, home and community-based, strengths-based and individualized, and culturally and linguistically competent.[1] It is useful to consider the Child and Adolescent Serving Systems Principles (CASSP) while exploring what the "ideal" system should look like. These principles uphold the importance of services that are youth-centered, family focused, community-based, coordinated across systems, least restrictive, and culturally appropriate.[2] Both SOC and CASSP principles, when effectively implemented, support the resilience and recovery of TAY.

To assist readers in readily accessing information on areas of concern to psychiatrists and other clinicians treating TAY in public systems, this document is organized as a set of frequently asked questions with responses framed within a SOC perspective. The document is not meant to serve as a clinical practice guideline, but offers important considerations relating to service system delivery and cross-system collaboration. While primarily intended for child and adolescent psychiatrists (CAPs), this document may also be helpful for other health professionals, as well as clinical program developers and policymakers, and family and young adult partners. Individual treatment and service decisions remain the purview and responsibility of the medical and/or behavioral team, and this document is not intended as medical advice for a specific patient.

Development of this document was led by the American Academy of Child and Adolescent Psychiatry (AACAP) Committee on Community-Based Systems of Care, and developed in collaboration with other AACAP committees, including Substance Abuse and Addictions, Transitional Age Youth and College Student Mental Health, as well as the American Psychiatric Association (APA), and staff from the Substance Abuse and Mental Health Services Administration (SAMHSA).

FAQs

Frequently Asked Questions Addressed in This Document:

FAQ 1: What is the transitional age period and why does it matter?

- *Not all clinicians and researchers agree about when the transitional age period starts and ends. For this document, the transitional age period is defined as spanning the age range of 16 to 25 years old.* This period is increasingly recognized as being a distinct developmental period characterized by progressive independence and the establishment of careers, families, and core values. The degree of independence from parents and establishment of adult roles varies widely within this group, underscoring a need to assess and respond to the developmental needs of individual TAY.
- *The transitional age period is characterized by important biological differences from later adult years.* Neurobiological development continues far into the twenties, with implications for appraisal of risk,[3] impulsivity, and other cognitive processes.[4] Adolescent neurodevelopment, and to some extent neurodevelopment in young adulthood, has been increasingly seen as a unique period of brain development,[3] with implications for brain reward systems, the impact of substance use, and the likelihood of risk in this population.
- *TAY are at high risk for having and developing substance use disorders, as well as use of substances that threaten physical and mental well-being, although not meeting diagnostic standards.* According to SAMHSA's 2015 National Survey on Drug Use and Health (NSDUH), in 2015 more than one in five young adults, 22.3%, were recent users of illicit drugs (ages defined in this survey were 18 to 25). Additionally, among this population 58.3% are recent alcohol users, 30.9% are binge drinks, and 26.7% use cigarettes, though it is worth noting that this does not account for the use of other forms of tobacco.[5]
- *Individuals "age out" of a variety of child-serving systems.* These systems include foster care, juvenile justice, pediatric primary care, and pediatric behavioral health care, resulting in a frequent gap or loss of services important to prevention and recovery from substance use. TAY with substance use disorders are likely to be involved with multiple systems new to them that may not be sensitive to this group's developmental needs. These include traditional adult medical care, civil and criminal justice, postsecondary education, employment, and welfare systems. TAY are also the age group at the second highest risk for being uninsured,[6] compromising access to treatment services. While adult systems may not be sensitive to TAY needs, it should be noted that resources are available through many college campuses for SUD prevention, support, treatment, and even health insurance. Preparing TAY to access these resources before leaving child-serving systems can increase access and ease the transition to adult systems.
- *This transition may bring new vulnerability to substance use or may challenge sustained recovery across socioeconomic groups.* Access to alcohol, tobacco, and other drugs is typically increased, as TAY cross age thresholds for legal purchase of alcohol and tobacco, have income that can be used to purchase licit and illicit drugs, and engage with peers and romantic partners who use. Experimentation with substance use may be facilitated by the absence of home restrictions, peer use, and liberal peer attitudes toward use. The consequences of use are tragic for many--an estimated 1,825 college students die annually from alcohol-related unintentional injuries, including motor vehicle crashes.[7]
- *Rates of substance use disorders are high in populations seeking treatment for mental health problems.* One national study of mental health service users found that 36.4% of 16-25-year-olds seeking help for a mental health disorder had a co-occurring substance use disorder.[8]

FAQ 2: How does access to drugs and alcohol influence patterns of use by TAY?

- *Likelihood of tobacco and alcohol use increases when TAY cross the legal age for purchase (currently 18 and 21 years, respectively).* The impact of age thresholds on marijuana purchase is currently unknown in the states that have set a legal purchase age (21 years in select states) and will require further study.[9,10]
- *Legalization of "medical" and recreational marijuana in some states and municipalities may increase availability through social networks, even for TAY who are not able to legally purchase.*[11] Additionally, legalization may decrease perception of risk from using, which may, in turn, correlate with increased use.[12] Therefore, the monitoring of trends involving TAY use of marijuana is highly recommended.
- *Physician knowledge of trends in the non-medical use of prescription drugs among TAY can inform prescribing practices that support safe use and reduce inappropriate access to these drugs.* Physicians need to be alert to potential misuse and diversion of prescription drugs. Among younger adolescents, the non-medical use of stimulants has declined in recent years. However, non-medical use among older adolescents and young adults has increased[13] actually doubling among college students and other young adults.[14] This may, in part, be due to the erroneous perception that stimulants enhance academic performance.[15] Use of other prescription drugs, namely narcotics, tranquilizers, and sedatives, has generally increased among twelfth-graders, college students, and young adults.[16] Currently, TAY comprise the age group with the highest rates of past month use of prescription drugs,[5] with recent non-medically indicated opioid use rates of 1.1% and 2.4% for 12-17 and 18-25 year-olds, respectively.[5] Clinical considerations for physicians include review of benefits and risks of these medications that consider the responsibilities, opportunities, and challenges with their patients in a manner that is relevant to TAY development and living environment(s), e.g. medication storage at college. In addition, physician use of Prescription Monitoring Programs, available in most states (and mandated for use, in some), can reduce risk of overdose and diversion of these drugs.
- *Synthetic drugs, such as K2/spice and other designer drugs, are frequently marketed towards younger age groups.* Synthetic marijuana was sold legally in head shops until March 2011, when the DEA restricted some of the chemicals used to manufacture these drugs.[18] These drugs are often misleadingly advertised as "natural" and may be easily obtained in head shops and convenience stores.[19] Use among middle and high school students between 2011 and 2014 has gone from being second only to marijuana, to a marked decline in use among adolescents, while rates of use among adults 19-30 years of age were found to be lower than for high school seniors (1.3% versus 5.8% use in the past 12 months).[20]

FAQ 3: What do we know about SUDs and specific mental health disorders in TAY?

- *Mental health disorders commonly co-occur with SUDs.* Many comorbid disorders have symptoms that predispose to substance use and drive continued use, such as negative affect, decreased inhibition, or increased reward responsiveness.[10,21]
- *Substance use and mental health treatment should be integrated.* Integration is important because the co-occurrence of substance use disorders and mental health disorders is very common, substance use is likely to worsen the severity and negatively impact recovery from mental health disorders, and mental health disorders are likely to complicate recovery from substance use. [22-24] In some situations, treatment steps may need to be sequenced. For example, reduction or cessation of the drug of use may need to precede medication management of the mental health disorder when adverse interactions between the psychiatric medication and the substance of use are of significant concern.[25]
- *ADHD has been found to be a risk-factor for tobacco and cannabis use in adolescence, [26] and young adults with ADHD have more difficulty achieving remission from substance use disorders.* [27] TAY with ADHD and substance use are more likely to experience mood changes, blackouts, drug cravings, and difficulty resisting use.[28]
- *Major Depression is associated with substance use in TAY,[29-31] and can be a direct consequence of substance use as is observed among cocaine users.*[32,33] In a longitudinal study of TAY, major depression at age 17 predicted SUDs in follow-ups through age 24,[34] and negative affect has been associated with increased risk for substance use in young TAY.[35] Individuals who reported any use of cannabis were found to be at 1.7 times greater risk of developing major depression.[36] An association between cannabis use and subsequent depression has been observed.[37-39] Alcohol and opioids are also both associated with an increased risk for depression.[40,41]
- *Bipolar Disorder is associated with a high rate of substance use.* Approximately 32% of youth with bipolar disorder develop a substance use disorder within an average of 2.7 years from the initial diagnosis of bipolar disorder.[42] Cannabis use may lower the age of onset of bipolar disorder and is associated with more lifetime suicide attempts in individuals with bipolar disorder in a dose-dependent fashion.[43,44] Individuals with bipolar disorder may have behavioral inhibition resulting in more involvement with pleasurable activities, including substance use.[45] In addition, substance use often interferes with the ability of the individual to take medications,[46] follow social rhythms, obtain insight, and cooperate with supports. Substances can trigger manic episodes through direct pharmacologic actions.[47]
- *Anxiety disorders are associated with alcohol use disorders and probably other substance use disorders.*[31] Social Anxiety Disorder has been associated with cannabis use[48] and alcohol use disorder and predicts the onset of alcohol use disorders in TAY.[49,50]
- *Prospective studies show that individuals who use cannabis heavily during adolescence carry an increased risk of developing psychosis and schizophrenia.*[51-55] When a patient develops psychotic symptoms, it can be useful to attempt to differentiate between substance-induced psychosis as opposed to a primary psychotic disorder. A number of clinical features may distinguish cannabis-induced psychosis from schizophrenia without cannabis use, such as an abrupt mode of onset,[56] relatively less family history, higher cognitive abilities, better premorbid functioning, and more positive symptoms.[57]
- *The risk of suicide and violence toward others increases with substance use; the presence of co-occurring mental health disorders may further increase this risk.*[58] Initial and ongoing risk

assessment and appropriate treatment to reduce risk is essential to the care of TAY with substance use disorders.

FAQ 4: How do traumatic experiences and PTSD impact substance use in TAY?

- *Posttraumatic stress disorder (PTSD) and experiences of physical and sexual abuse are more common in youth with substance use disorders than in the general population.*[59,60] While PTSD has a robust association with substance use, the nature of the association is complex.[61] TAY may be more likely to use substances to cope with the effects of trauma and comorbid affect dysregulation. Some studies with TAY find that substance use often precedes trauma[62,63] with substance use increasing risky behaviors and impairing ability to engage in protective behaviors. In addition, abuse and neglect is more likely to occur in families with SUD, and TAY from these families may have both genetic and psychosocial risk for developing SUD, PTSD, and other trauma-related mental health disorders.[64]
- *Trauma-informed treatment models, screening instruments, and provider training are important for enhancing engagement and treatment outcomes.* Resources such as those available through SAMHSA can be useful for clinicians working with TAY with SUD and trauma.[65]
- *The evidence base for psychosocial treatments for TAY with SUD and PTSD is limited, and a number of studies have largely enrolled younger adolescents or older adults.* One example, Seeking Safety, a 25-session intervention involving psychoeducation, cognitive-behavioral therapy, and case management, resulted in initial improvement in substance use behaviors and trauma-related symptoms compared to treatment as usual, but these differences were not sustained at three-month follow-up (mean study population was 16 years old).[66] Risk Reduction through Family Therapy (study population ages 13-17) and Trauma Systems Therapy (study population ages 5-21) are two modalities that have been studied in pilot programs and have integrated other evidence-based treatments, but Trauma Systems Therapy has not shown a reduction in substance use.[67] While mostly studied in younger age groups, these interventions may potentially benefit the young adult population. More treatment research is needed to better serve this high-risk population.

FAQ 5: What are some special considerations for specific TAY subpopulations?

- *Developmental Disabilities:* Conflicting evidence exists regarding the prevalence of substance use disorders among persons with intellectual disability (ID), with some studies indicating a higher risk for the development of SUDs compared to the general population,[68] and other studies indicating a lower risk at least among adults with ID.[69] Evidence exists, however, that individuals with ID may be at higher risk of substance-related problems in the context of SUDs and have decreased access to care compared to the general population.[69-71]
- *Juvenile Justice system:* TAY in the juvenile justice system are at increased risk for substance use and may have entered the legal system as a result of this use. While the cited rates of substance use in the juvenile justice population vary, estimates find the rates to be highly prevalent, ranging from 25 to 67%.[72] The rate of drug involvement increases in the adult justice population,[73] and treatment of substance use disorders during and after prison has been identified as a significant need.[74] TAY can be involved in both juvenile justice and the adult justice systems. States can extend juvenile jurisdiction up to age 24 in some states.[75] The juvenile justice system has evolved since the 1990s to increase youth opportunities for rehabilitation and treatment.[76] "Drug courts" have been developed as an alternative to

incarceration for substance-involved adolescents and adults. These courts might lead to a variety of outcomes including detoxification programs, inpatient facilities, outpatient therapy and self-help groups, among others.[77] Another juvenile court option available to parents in some jurisdictions is the filing of a "child in need of services" or "child requiring assistance" for adolescents up to age 18, to support treatment referral and attendance.[78] These external motivations for treatment may be critical for TAY who do not have the insight or internal motivations to engage in treatment. In fact, even if youth do not wish to enter treatment, many will still benefit from treatment.[79]

- *Homeless/Runaway Youth:* In a large study of homeless and runaway youth ages 16-19 sampled from shelters and the street in eight cities in the Midwest, 60.5% met criteria for lifetime substance use disorder.[80] Among those with a substance use disorder, 93% met criteria for at least one other mental disorder, suggesting very high rates of comorbidity.[80] Despite the high burden of illness, rates of service use in this population vary, and few treatment studies have targeted homeless youth. In one study, only 38.2% of homeless youth who screened positive for drug dependence reported that they needed help, and of these, only 43.1% sought help.[81] Service delivery factors identified in qualitative studies include youth motivation, support, the quality of the therapeutic relationship, flexibility and comprehensiveness of services, availability of harm-reduction services, stigma, and accessibility.[82]
- *Lesbian, Gay, Bisexual, and Transgender (LGBT):* Several studies have documented the high rates of substance use among sexual-minority youth.[83-85] A meta-analysis done by Marshal et al found that the odds of substance use among LGBT youth was 190% higher than for heterosexual youth with the highest rates within bisexual and female subpopulations.[86] Factors driving these higher use rates include normality of substance use within some LGBT communities, participation in social activities centered on alcohol and drug use (e.g., bars, clubs, and circuit parties), and stress from prejudice and discriminatory practices.[87] The National LGBT Resource Center is one source for training and materials to support cultural competency to enhance care within this population.[88]
- *Youth in Foster Care:* TAY comprise about 16% of the approximately 428,000 children and youth in the US foster care system.[89] Lifetime rates for use of drugs other than marijuana, such as opiates, crack/cocaine, hallucinogens, and amphetamines, were higher for youth in foster care. Youth formerly in the foster care system have high rates of substance use disorders.[90]
  A study of homeless young adults in Philadelphia who were previously involved in the foster care system revealed that many did not admit to substance use while in foster care due to concern about removal from placement.[91,92] This finding suggests a need for clinicians working with this population to have a heightened sensitivity to under-reporting of substance use and to identify strategies to support trust and safety in treatment relationships.
- *College students:* According to the 2015 Monitoring the Future Study, heavy drinking rates remain a concern on college campuses with students reporting a past 2-week binge drinking rate of 31.9% (compared to 23.7% in non-college peers). However, the daily marijuana use rate (4.6%) has surpassed daily alcohol use rates and has tripled since 1994 (1.8%). Cigarette smoking rates are lower in non-college peers (11.3% past month and 23.5%, respectively), but are still unacceptably high.[17] Privacy and confidentiality laws pertinent to this population are fairly complex, involving the Health Insurance Portability and Accountability Act (HIPAA), the Family Education Rights and Privacy Act (FERPA), and other state and federal regulations regarding mental health and substance use (see also FAQ #6). The American Disabilities Act of 1990 and

other disability laws are also relevant to privacy and service provision in this population. The Jed Foundation has developed a helpful resource on these laws.[93]

- *Military:* More than 43% of active duty members of the military are 25 years of age or younger.[94] Substance use patterns in the U.S. military among 18-25 year-olds differ from that in the civilian population. The rates of heavy drinking among this age group (5.9-14.3%) were significantly higher than rates among a similar age group in the civilian population (2.5-6.9%).[95,96] In contrast, 18-25 year-olds in the military had lower rates (~1.2%) of abusing prescription drugs compared to the similar age range in the civilian population (~15.2%).[95,96] The military and other government agencies such as the National Institute on Drug Abuse (NIDA), have instituted a number of interventions, including treatment programs and awareness campaigns to reduce substance use, particularly alcohol abuse considering the military culture of heavy drinking.[95,97,98] Military programs that include religious and spiritual components may be particularly useful to reduce substance abuse among personnel.[95]
- *TAY with Chronic Medical Problems:* Many clinicians working with TAY with chronic disease hypothesize that attitudes related to the burden of disease may increase substance use, such as a decreased expectation for a healthy life, a desire to "fit in" with peers who are not burdened with chronic disease, and a desire to "forget" and "just have fun." Some studies have found similar or lower rates of risky behaviors in youth with chronic medical illnesses such as cystic fibrosis, sickle cell disease, and epilepsy as compared to similar youth without medical illnesses.[99,100] Of note, when substance use exists for these and other youth with chronic medical illness, health outcomes may be adversely affected.
  One study of youth with Type I Diabetes mellitus and substance use observed worse glycemic control.[101] For youth with asthma, drug abuse has been shown to accelerate the decline in lung function and to increase numbers of life-threatening asthma attacks, and greater asthma mortality.[102]
- *Due to high risk behaviors, TAY with SUDs are also at higher risk for various chronic diseases, such as the human immunodeficiency virus (HIV), hepatitis C (HCV), and other sexually transmitted infections (STIs).* TAY with chronic illnesses have lower rates of engagement in treatment and adherence to treatment.[103-105] In some states, while hepatitis C rates in the general population have declined, these infections have been noted to be increased among TAY.[106] Special attention should be paid to prevention, screening, and treatment engagement for HIV, HCV and other sexually transmitted diseases among TAY with SUDs.
- *Substance use at any level, even occasional use, increases the risk of injury.*[107,108] This highlights the importance of screening and integration of care needs for the sequelae of injury. In particular, traumatic brain injury (TBI) may result in cognitive and emotional impairment that may complicate treatment and sustained recovery. Screening for TBI with appropriate neurocognitive assessment and rehabilitation may be a critical component of an integrated care plan and is ideally incorporated within systems of care for TAY with SUD.
- *Substance use rates are higher among pregnant TAY than among older pregnant women.* Studies have found that the use of a systems of care approach can help prevent and reduce adverse effects of substance use to mother and offspring.[109] Women who use drugs are more likely to suffer complications during pregnancy and delivery, for example, tobacco use is associated with higher risk of placenta previa and abruption.[110] Offspring of mothers who used substances in pregnancy are at significant risk for short and long term effects, including impaired

fetal and postnatal growth, neonatal withdrawal symptoms, abnormal neurobehavioral development, and Fetal Alcohol Spectrum Disorders (FASD).[111]

- *All TAY with substance use disorders deserve attention to preventive and routine medical and dental care and unmet needs are important to identify and address.* In addition to general health screening, systems of care should identify opportunities to address wellness behaviors, such as healthy eating and physical activity that are often established during the TAY years, and are critical to preventing cardiovascular and other chronic disease in later years.[112] A systems of care approach recognizes that TAY with SUD are typically involved with multiple service systems. Striving to actively communicate and integrate services and to support TAY involvement in this process facilitates TAY empowerment, mentioned in more detail under FAQ #8.

FAQ 6: What are the laws about treatment planning and confidentiality when TAY turn 18?

- *In almost all circumstances, clinicians are required to obtain consent to speak with parents, guardians, and other family members when youth turn 18.* Federal law generally requires that any federally assisted drug and alcohol treatment program obtain written consent before disclosing any treatment information.[113-115] Confidentiality laws vary by state with some states providing broader access to health information than others, especially for minors.[114-116] Details on the variability of the laws are beyond the scope of this review, and it is recommended that treatment providers seek legal advice should any questions about confidentiality arise. While adolescents may legally consent to substance use treatment in many states, the decision to involve family is often a critical one, and may be beneficial to the adolescent.[117]
- *Several legislative initiatives have sought to clarify confidentiality laws to allow parents access to information about their child of TAY age,* such as aspects of H.R. 2646 (114th Congress), "Helping Families in Mental Health Crisis Act of 2015," as introduced, amended, and subsequently enacted as part of a larger measure.[118] The extent to which the youth's confidentiality should be upheld remains controversial, [119] and CAPs serving TAY will need to monitor developments in this area.
- *When clinicians have the opportunity to work with youth before they turn 18, preemptive discussions about confidentiality, treatment planning, and parental involvement can be very helpful with the negotiation of new roles and expectations for communication and decision-making.* Both youth and parents should be educated about confidentiality laws and about benefits of continued parent involvement. More information and resources on confidentiality issues can be found on SAMHSA's website: http://www.integration.samhsa.gov/operations-administration/confidentiality.

FAQ 7: What is the family's role in the treatment of TAY?

- *TAY with SUD may benefit from variable degrees of family involvement.* TAY may be in a variety of stages of separation and individuation from their parents. Some TAY actively involve parents in their treatment well into their twenties, some struggle with decisions about when to involve parents, while others have achieved a high level of independence at an early age.[120] Furthermore, families vary considerably in how much they support recovery, and these factors should be assessed and considered in treatment decisions.
- *Family-based treatment may result in better outcomes.* Multiple treatment models have demonstrated effectiveness with younger TAY and may be relevant for older TAY (see FAQ #10). These models include Multidimensional Family Therapy (MDFT), Brief Strategic Family Therapy

(BFST), Multi-Systemic Therapy (MST), Family Behavior Therapy (FBT) and Functional Family Therapy (FFT).[121] Contingency management strategies have proven effective with treatment of both adolescents and adults, and family members may have important roles in implementation of these.[121,122]

- *Youth and families may benefit from a discussion about the rationale for including the family versus allowing the youth to independently engage in treatment.* Clinicians can assist TAY who are not accompanied by parents with identifying pros and cons of family involvement for their unique situation, using evidence-based assessment tools and treatment plans to guide the discussion. Parents who present without the TAY can be offered information about substance use and treatment, as well as guidance about ways to support TAY engagement in treatment and recovery. Parents may be screened for substance use and offered services for addressing any problems that are identified.
- *Being prepared for challenges in balancing confidentiality needs of youth with parents' wishes to be actively involved can be helpful in treating TAY with SUDs.* Recognizing the potential for stigma and other negative consequences of disclosing substance use- related behaviors, clinicians may appropriately be concerned about loss of TAY trust and engagement when information is shared with parents, even with TAY permission. On the other hand, concerned, caring parents can be powerful treatment allies and advocates. Clinicians may need considerable skill to address these issues without the TAY feeling alienated or coerced. Avoidance of "all or nothing" parental involvement may be helpful. For example, youth may request confidentiality about specific content of therapy sessions but simultaneously permit informing parents about attendance or involving parents when pre-determined safety thresholds have been crossed.
- *Substance use disrupts the healthy development of the family and of the individual family members, and the recovery from substance use is best supported when substance use by other family members is addressed, whether that person is a parent, sibling, or the TAY's spouse or partner.* While many TAY live with parents well into their twenties, others are establishing traditional or non-traditional families of their own, through marriage or partnerships, with or without young children. Unless clinically contraindicated due to domestic violence or other concerns, couples or family therapy may be valuable to treatment. Behavioral couple or family therapy (BCT/BFT) is empirically supported for young (and older) adults, reducing substance use and improving family relationships.[123] When children are involved, screening and monitoring for abuse and neglect is important, and even in the absence of abuse or neglect, therapy focusing on parent-child relationships may support healthy child development and the sustained recovery of TAY patients.

FAQ 8: How can services better engage TAY to enter and to stay in treatment?

- *A systems of care approach underscores the importance of a commitment to delivering strengths-based, culturally competent services that are appropriately flexible to the individual TAY and his or her circumstances.* Given the nature of SUDs, systems should anticipate challenges to a strengths-based approach and plan strategies that support engagement. As an example, relapse to substance use can be framed as an opportunity for learning and recommitting to treatment rather than disconnecting from care.
- *Engagement in services is a major challenge for TAYs for multiple reasons*. These include a potential desire to be independent from services that have previously been imposed by adults

or parents, fewer negative physical consequences of addiction in adolescence and young adulthood, and social beliefs that may accept use as normative (e.g. perception of binge drinking as typical TAY behavior).

- *Motivational Interviewing (MI)* is one approach for treatment engagement that has been extensively studied and found useful with adolescents and young adults with SUD.[124] Described as "a form of a collaborative conversation for enhancing a person's own motivation and commitment to change," MI recognizes ambivalence as common and normal, and not a sign of pathology.[125] MI-trained counselors attend carefully to change language and use specific skills to explore and strengthen a person's reasons for change. The counselor's attitude of acceptance and compassion are considered critical to successful MI conversations. While many elements of MI may seem intuitive and easy for clinicians, training and supervision are important for effective use of MI.
- *TAY are more likely to engage in services when they feel empowered. Consistent with systems of care principles, one way to increase empowerment is to include youth in treatment programming.*[126,127] Several model programs, such as Australia's Headspace program (http://www.headspace.org.au) have effectively incorporated youth preferences in service provision. Other youth voice organizations, such as Youth M.O.V.E. (http://www.youthmovenational.org), Let's Erase the Stigma (http://www.lets.org), Minding your Mind (http://www.mindingyourmind.org), Active Minds (http://www.activeminds.org) and others encourage treatment by normalizing behavioral health among TAY. These efforts reduce stigma and educate other youth about behavioral health. In addition, peer support, such as certified peer specialists are increasingly utilized and are now billable in several states, including Georgia and Massachusetts.[128]

FAQ 9: Are specific screening and assessment tools available for use with TAY?

- *While there is evidence that screening followed by brief interventions can help address TAY substance use, there are few systematically evaluated standards in this population.* Among the tools with support are the Alcohol Use Disorders Identification Test (AUDIT), the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) and the Substance Abuse Subtle Screening Inventory (SASSI) which includes a form for adolescents and a separate one for young adults. For additional screening information, see SAMHSA's website: http://www.integration.samhsa.gov/clinical-practice/sbirt/screening. Many college-based interventions use the Screening, Brief Intervention, and Referral (SBIRT) model which is also appropriate for use in health care settings.[129]
- *The Global Appraisal of Individual Needs (GAIN) is a set of screening, biopsychosocial assessment, and follow-up measures that spans adolescence through adulthood. It is appropriate for TAY in a variety of clinical and community settings (e.g. mental health, employee assistance, drug court) and is available in paper-pencil and computer assisted forms.* Psychometric, licensing and training information can be found at the GAIN Coordinating Center (http://gaincc.org/).
- *The American Society of Addiction Medicine Criteria is a commonly accepted, strengths- based guideline for level of placement for treatment based on clinical needs.* The criteria are appropriate across the TAY age range with treatment plans adapted for adolescents and for adults. Assessment for placement level is based on six dimensions: 1) acute intoxication/withdrawal potential; 2) biomedical conditions and complications; 3) emotional,

behavioral, or cognitive conditions and complications; 4) readiness to change; 5) relapse, continued use or continued problem potential; and 6) the recovery environment.

FAQ 10: What psychosocial treatments have evidence for effectiveness with TAY with SUD?

- *Familiarity with the principles of Evidence-Based Medicine and Shared Decision Making will assist systems of care with the selection of psychosocial treatments.* At the time this document was written, the following treatments are considered evidence-based. For additional details regarding general clinical guidelines for treating adolescents, the reader can refer to the AACAP practice principles.[130] For adult practice guidelines, the reader can refer to the American Psychiatric Association substance use disorder practice guidelines.[131] SAMHSA's Evidence-Based Practice web guide is another useful resource (http://www.samhsa.gov/ebp-web-guide).
- *Cognitive Behavioral Therapy (CBT) is well-established in the treatment of substance use disorders in adults, and combined with motivational enhancement therapy (MET), has been studied in adolescents and younger TAY (MET-CBT).*[132] MET-CBT can be used in individual and group therapy. Training is important to effective delivery of MET-CBT; trainers and treatment manual resources may be found on SAMHSA's National Registry for Evidence-Based Programs and Practices website.[133] Technical strategies used in CBT include functional analysis of attitudes, behaviors, and skills relevant to substance use and abstinence; identification and management of triggers for use; consequences for using and refraining from use; self-monitoring of feelings, thoughts, and behaviors; and development of activities that are incompatible with drug use. Motivational enhancement therapy, such as motivational interviewing (MI) (described in FAQ #9), is used to engage and maintain a collaborative relationship between therapists and patients.[124]
- *Contingency management (CM) is effective for treatment of substance use disorders of adolescents and adults.*[134] CM provides immediate and tangible rewards to reinforce objectively determined abstinence and other behaviors that support abstinence such as treatment attendance, and it may be combined with other evidence-based treatment modalities. Additional information may be found on the SAMHSA website.[133]
- *The Adolescent Community Reinforcement Approach (A-CRA), studied in the Cannabis Youth Treatment study with younger TAY, uses a formal assessment process, including a self-assessment component, to identify determinants of substance use behavior and pro-social behavior.*[135] Based on this assessment, specific therapeutic procedures are selected to support abstinence. These procedures may include work on problem-solving skills, anger management, job-seeking skills, increasing pro-social recreational activities, and caregiver communication. Provider training typically includes an initial 4-day commitment, followed by supervision, and further information is available on the SAMHSA website.[133]
- *Brief Alcohol Screening and Intervention for College Students (BASICS),* specifically designed for TAY, combines personalized feedback about drinking behaviors with motivational interviewing techniques to explore and promote commitment to change. It also offers strategies and problem-solving techniques to help students decrease risky drinking.[136] Similar brief interventions using MI have been extended to cigarette and marijuana use.[137-139] Social norms feedback is another brief intervention used for alcohol misuse on campus.[140]
- *A number of family therapy models have been tested with adolescents and may be useful when working with older TAY and their families.* These models include Brief Strategic Therapy, Family

Behavior Therapy, Functional Family Therapy, Multidimensional Family Therapy, and Multisystemic Therapy.[121] Common treatment targets include communication between family members, quality of the relationships between family members, supervision and monitoring of behavior, the interface of the family with other systems, and substance use of family members.[121]

- *Mutual help organizations (MHO) are free, peer-led resources that may be readily accessible in many communities.* Twelve-step MHOs, such as Alcoholics Anonymous (AA) and Narcotics Anonymous (NA), are the largest and most studied of the MHO.[141] These programs are abstinence-oriented and encourage participants to work through a series of 12 steps to facilitate personal and spiritual growth as part of recovery. Some aspects of MHOs may be problematic for some TAY, such as limited participation of peers in local groups or potential conflicts with the developmental task of achieving independence, e.g. the admission of powerlessness. A secular variant of a MHO, Self-Management and Recovery Training (SMART Recovery), incorporates cognitive-behavioral principles and is increasingly available nationally.[141]
- *Research specifically assessing TAY participation in MHO is limited but has shown that attendance and active involvement (e.g. having a sponsor, working steps, socializing with other members) are associated with improved SUD outcomes following residential SUD treatment.*[142] In one TAY-specific study, patients with co-occurring disorders appear to attend and become actively involved at similar rates to their SUD-only peers during the first year after residential SUD treatment and those actively involved at the highest levels in 12-step MHOs had abstinence rates similar to those with SUD-only.[143]
- *The evolution of Therapeutic Communities (TCs) has increasingly incorporated medication-assisted therapy for SUDs as well as comprehensive mental health treatment.*[144] TCs arose from a mutual self-help movement, offering long-term residential treatments focusing on lifestyle changes as well as abstinence, often led by peers in recovery, but over time incorporating professionals who may or may not be in recovery themselves. Outcome studies are generally positive in terms of substance use and mental health concerns.[145-147]
- *Recovery communities for TAY, such as recovery high schools and recovery dormitories, are intended to provide an environment that supports drug-free living through peer and professional support.* While relatively few in number, and minimally studied, these communities are reasonable to consider for TAY who are at high risk for relapse after initial inpatient and/or traditional residential treatment. Providers considering recommending these communities to patients may want to inquire about staffing, support services, policies and procedures for managing clinical crises; attitudes about psychiatric medications and other mental health treatment; and outcome evaluations, both positive, and potential negative effects. The Association of Recovery in Higher Education (www.collegiaterecovery.org) is one source for additional information about college programs.

FAQ 11: Do medications to assist with withdrawal or recovery play a role in treatment for SUD among TAY?

- *Several medications have been found to be effective in treating addictive disorders in adults, and in some cases, there is preliminary evidence to support their use in adolescents.* These medications generally work by decreasing withdrawal symptoms, cravings, or urges. In studies investigating the use of these medications, treatment efficacy is generally assessed by duration of treatment retention, number of drug-free urine toxicology screens, and/or time to relapse.

The risks and benefits of pharmacological treatment for drug dependent youth should be carefully considered and discussed with the patient and their family.

- *Medications can be used in the treatment of opioid dependence for both detoxification as well as prevention of relapse (maintenance treatment).* Methadone, buprenorphine, and naltrexone have all been shown to be effective maintenance treatments in adults. Medications used in the treatment of opioid detoxification include methadone and buprenorphine, and to a lesser extent, clonidine. Although evidence is limited in adolescents, there are some studies demonstrating safety and efficacy of methadone and buprenorphine for both detoxification and maintenance treatment in this age group.[148-152] While the Food and Drug Administration (FDA) recommends buprenorphine be used only in individuals aged 16 and older, randomized control trials have investigated its use in adolescents as young as 13 and found no serious side effects, and improved outcomes.[148,149] Methadone, which remains the most effective treatment for opioid dependence, must be dispensed through FDA-licensed methadone maintenance programs and participants must meet certain eligibility criteria including being 18 or older. Federal guidelines stipulate that individuals younger than 18 years of age may be admitted if they have two previous unsuccessful treatment attempts, and have the consent of a guardian, but state regulations may be more stringent. Poor retention of TAY in buprenorphine-maintenance programs[153] demonstrates that work needs to be done in the dissemination and implementation of this treatment modality.
- *Expanded access to naloxone, an opioid antagonist, while not treating the addiction, has helped to reduce overdoses by rapidly reversing the respiratory suppression caused by opioids.* Auto-injectable and nasal spray formulations have made rescue use by friends and family more feasible. People who use these kits should be provided training in recognition of overdose, proper use of naloxone, knowledge of its limited time effects, and the importance of calling 911 in cases of overdose. The Prescription Drug Abuse Policy System (www.pdaps.org) is one resource for information about state laws governing distribution and use of "rescue" naloxone kits and Good Samaritan 911 immunity.
- *For the treatment of alcohol use disorder, three medications are currently approved by the FDA for patients more than 18 years of age: disulfiram, naltrexone, and acamprosate.* Although there have been mixed results in studies of disulfiram, it has been shown to be an effective treatment in adults when given in supervised conditions.[154,155] There is one randomized control trial of its use in adolescents that showed positive results, but in general, this medication has been considered a second line choice due to poor adherence rates.[156] Several randomized control trials, as well as meta-analyses, have found naltrexone and acamprosate to be effective and well tolerated in the treatment of alcohol dependence. There is currently limited evidence of their efficacy for alcohol dependence in adolescents. One small randomized trial in adolescents ages 16-19 years found acamprosate was effective in maintaining abstinence.[157] Naltrexone has been shown to be well tolerated in adolescents when used for other indications.[158]
- *Although there are currently no FDA-approved medications for cannabis dependence, two recent randomized control trials show promise for N-Acetylcystine, as well as gabapentin.* Although the gabapentin trial was in adults, the study demonstrating efficacy of N-Acetylcysteine involved adolescents ages 15-21 and found those treated with N-Acetylcystine had double the odds of cannabis-free urine tests. Both medications were well tolerated.[159,160]
- *Medication outcomes for nicotine dependence appear to be age-dependent.* While behavioral support is often recommended as a first line intervention for those under 18 years of age, the

addition of pharmacotherapy may be warranted in select individuals. Studies in adolescents have found significantly improved quit rates when the nicotine patch is added to a cognitive behavioral intervention.[161] A prescription is required for individuals under age 18 to buy nicotine replacement products. Bupropion and varenicline have been shown to improve quit rates in nicotine dependent adults, but studies of bupropion for smoking cessation in adolescents have found either no efficacy or lower efficacy than in adults; therefore this medication is generally considered a second line choice to nicotine replacement therapy.[162,163] Varenicline is generally not recommended for adolescents due to a lack of evidence regarding efficacy, as well as safety concerns.

- *There is currently no strong evidence to support the use of any pharmacological treatments for cocaine or methamphetamine use in any age group.*

FAQ 12: How do I keep up-to-date on what's evidence-based in this population?

- *Helpful resources include the websites for SAMHSA, NIDA, the National Institute on Alcohol Abuse and Alcoholism, and the Office on Smoking and Health-Centers for Disease Control and Prevention.* Highlights include statistics on substance use prevalence and trends, evidence-based treatment manuals, summaries of recently completed studies, educational material for youth, parents, and others, SAMHSA treatment locator and best practice guidelines for community program development and public health policies.
    - SAMHSA treatment locator: https://www.findtreatment.samhsa.gov
    - Substance Abuse and Mental Health Services Administration: www.samhsa.gov
    - National Institutes of Drug Abuse: www.drugabuse.gov
    - National Institute on Alcohol Abuse and Alcoholism: www.niaaa.nih.gov

- *In addition, the websites of organizations such as the American Academy of Child and Adolescent Psychiatry (AACAP), American Academy of Pediatrics (AAP), American Academy of Addiction Psychiatry (AAAP), American Psychiatric Association (APA), and American Society of Addiction Medicine (ASAM) contain useful information* such as Continued Medical Education activities, practice guidelines, technical reports, consumer information, and advocacy support.
    - American Academy of Child and Adolescent Psychiatry: www.aacap.org/AACAP/Families_and_Youth/Resource_Centers/Substance_Use_Resource_Center/Home.aspx
    - American Academy of Addiction Psychiatry: www.aaap.org
    - American Psychiatric Association: www.psychiatry.org
    - American Society of Addiction Medicine: www.asam.org
    - Providers' Clinical Support System for Medication Assisted Treatment: www.pcssmat.org
    - American Academy of Pediatrics Committee on Substance Abuse and Prevention: www.aap.org/en-us/about-the-aap/Committees-Councils-Sections/substanceabuse/Pages/home.aspx
    - SAMHSA Youth Engagement Toolkit: http://store.samhsa.gov/product/The-Substance-Abuse-and-Mental-Health-Services-Administration-s-SAMHSA-Youth-Engagement-Guidance/SMA16-4985

Summary:

The transitional age period is a time for heightened vulnerability to substance use for many TAY. The TAY population has unique needs, including but not limited to, a unique stage of biological development, increasing access to substances, changing relationships with parents and other adults, changes in legal status, and changes in access to clinical and social services. Continuity of care is threatened by TAYs frequent involvement with a variety of child-serving and adult-service agencies that may not function in an integrated manner, including mental health and SUD providers, school and college professionals, juvenile justice, and child welfare staff. Given the well-documented challenges with engagement in substance use treatment, collaboration and coordination of services should bridge age criteria set by those services. Multiple issues should be considered in planning for transitions, including confidentiality concerns, management of increased access to substances, potential changes to or loss of health care insurance, changes to living situations, independent medical decision-making, and other factors that may require alteration of the treatment plan (see also FAQ #3). Recommended strategies for enhancing TAY engagement in substance use treatment include incorporating youth perspectives, respecting the ethnic and cultural values of TAY, adapting services to the biopsychosocial needs of the individual, flexibility with respect to family involvement, and appropriate involvement of peers. A systems of care approach offers many opportunities to intervene with TAY to improve outcomes by making use of collaborative and integrative care, evidence-based interventions, and culturally competent and youth empowering practices.

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