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Recommended Curriculum Guidelines for Family Medicine Residents

Substance Use Disorders

This document is endorsed by the American Academy of Family Physicians (AAFP).

Introduction

Each family medicine residency program is responsible for its own curriculum. The AAFP Commission on Education's Subcommittee on Graduate Curriculum has created this guide as an outline for curriculum development, and it should be tailored to the needs of the program.

Through a series of structured and/or longitudinal experiences, the curricula below will support the overall achievement of the core educational competencies defined by the Accreditation Council for Graduate Medical Education (ACGME) and provide guideposts to program requirements specific to family medicine. For updates and details, please refer to the ACGME website at www.acgme.org. Current AAFP Curriculum Guidelines may be found online at www.aafp.org/cg. These guidelines are periodically updated and endorsed by the AAFP and, in many instances, other specialty societies, as indicated on each guideline.

Preamble

Substance use disorders are a common cause of morbidity and mortality. These disorders are as prevalent as diabetes, asthma, cholesterol disorders, and hypertension. Although tobacco and alcohol continue to be the most commonly used substances and cause the most morbidity and mortality, the growing prevalence of other substance use disorders, especially involving opioids, has attracted much public and governmental attention. Physicians have the responsibility to identify patients at risk for substance use disorders and initiate prevention and treatment efforts. Despite the growing body of evidence that such efforts can be efficacious and cost-effective, physicians are often inadequately trained to meet this challenge and fail to appreciate the effectiveness of treatment. This Curriculum Guideline is intended to assist family medicine residency faculty in establishing educational programs that will provide family

medicine residents with clinical competence in substance use disorder screening, intervention, and treatment.

Patient Care

At the completion of residency, a family medicine resident should be able to:

1. Demonstrate respectful, nonjudgmental, and caring behaviors toward patients who use substances or have a substance use disorder (Patient Care, Professionalism)

2. Obtain a thorough history regarding the patient's substance use, including questions about behaviors that meet criteria for a substance use disorder according to the *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition (DSM-5) (Patient Care, Medical Knowledge, Interpersonal and Communication Skills)

3. Apply motivational interviewing techniques to implement screening, brief intervention, and referral for treatment to identify and manage patients who are at risk of adverse health effects due to substance use or who have a substance use disorder (Patient Care, Medical Knowledge, Interpersonal and Communication Skills)

4. Develop and facilitate interventions and treatment plans for patients who have substance use disorders and associated conditions (Medical Knowledge, Systems-Based Practice)

5. Educate patients and their families about the medical model of addiction, including how addiction—like other chronic conditions—can be treated using a multidisciplinary approach that incorporates patient-centered recovery goals, pharmacotherapy, behavioral interventions, patient self-management skills, peer support, and periodic check-ins with a primary care clinician (Medical Knowledge, Patient Care, Interpersonal and Communication Skills, Systems-Based Practice)

6. Locate and use evidence-based resources for the diagnosis and treatment of substance use disorders (Practice-Based Learning and Improvement)

7. Identify and refer patients to local resources to assist in treatment and intervention for patients who have substance use disorders (Patient Care, Systems-Based Practice)

8. Describe the roles that physicians, pharmaceutical companies, health care systems, social determinants of health, stigma, racism, the U.S. war on drugs, and other factors have on the risk of substance use, substance use disorders, adverse health outcomes, incarceration, societal effects, barriers to care, and health disparities (Systems-Based Practice, Patient Care)

9. Apply prevention strategies for substance use disorders

a. Provide primary prevention by talking with youth about substance use, peer pressure, development of skills to prevent substance use, and resources to help youth and families discuss and prevent substance use disorders
b. Provide secondary prevention with the Screening, Brief Intervention, and Referral to Treatment (SBIRT) model for tobacco, alcohol, and other drug use for all patients

10. Apply appropriate diagnostic tools to screen patients for substance use disorders while recognizing that screening tools have been shown to exacerbate health disparities and extra steps are necessary to avoid stigmatizing or subjecting vulnerable populations to excessive risks associated with screening for substance use disorders

11. Perform psychological, social, and physical assessment of patients if screening results are positive for substance use disorders

12. Assess readiness to change and recovery goals in all patients who have substance use disorders

13. Treat substance use disorders using the following:
    a. Office-based brief interventions (e.g., understand pros and cons, ask permission, provide feedback, enhance self-efficacy and motivation to change, give advice, and negotiate goals, or refer for further treatment)
    b. Motivational interviewing to facilitate behavior changes
    c. Appropriate documentation and coding for a brief intervention, including obtaining needed permission from the patient to proceed
    d. Inclusion of family/support system in assessment and initial treatment
    e. Ongoing monitoring to help the patient and family achieve desirable outcomes and recognize signs of recurrence of substance use disorder symptoms
    f. Pharmacotherapy and medical management of acute overdose, withdrawal syndromes, metabolic stabilization, and maintenance therapy, including medications for addiction treatment

14. Consult specialized treatment programs and other community resources, and refer patients and family members to such programs and resources

15. Recognize and address common medical comorbidities

16. Manage acute and chronic pain that involves the use of opioid analgesics with the following:
    a. Explanation of risks and benefits
    b. Appropriate monitoring parameters
    c. Strategies that minimize the risk of addiction
    d. Appropriate specialty referral for patients who have a history of substance use disorders, especially those with opioid use disorder, since they may

have hyperalgesia and increased opioid tolerance, and they are at risk of not receiving adequate treatment of pain
    e. Naloxone prescription for resuscitation in the event the patient experiences opioid toxicity or overdose

17. Appropriately integrate various screening, diagnostic, and monitoring tools in patient care, including the following:
    a. Tools to screen for substance use (e.g., National Institute on Drug Abuse [NIDA] Quick Screen, Alcohol Use Disorders Identification Test-Concise [AUDIT-C], AUDIT, CRAFFT, CAGE)
    b. Tools for measurement-based care (e.g., Brief Addiction Monitor)
    c. Screening protocols for HIV, hepatitis C
    d. DSM-5 criteria for substance use disorders
    e. Techniques for responding to a positive screening tool result (e.g., motivational interviewing)

18. Recognition of signs that a patient's request for, or use of, a controlled substance may be due to dependence or a substance use disorder

Medical Knowledge

In the appropriate setting, a family medicine resident should demonstrate the ability to apply knowledge of the following:

1. Clinical indications for drug testing, as well as selection and interpretation of alcohol and other drug tests, including the following:
    a. Informed consent prior to drug testing
    b. Drug screening and confirmatory testing
    c. Blood alcohol levels
    d. Biomarkers for alcohol use (ethyl glucuronide and ethyl sulfate)
    e. Chronic pain management screening and testing
    f. Urine testing for adherence with buprenorphine to treat opioid use disorder

2. Knowledge of techniques and accepted practices for appropriately prescribing and monitoring patient use of controlled substances

3. Epidemiology of substance use disorders, including the following:
    a. Distinction between substance use and substance use disorder
    b. Overall prevalence of substance use and substance use disorders
    c. Risk and protective factors for developing substance use disorders
    d. Course and outcomes of substance use disorders, including rates of recovery
    e. Relationships between substance use/substance use disorders and associated major causes of morbidity and mortality (e.g., cardiovascular disease, cerebrovascular disease, cancer, liver disease, homicide, suicide, motor vehicle accidents, trauma, psychiatric conditions, and infectious diseases)
    f. Impact on interpersonal and societal functioning, including crime, violence,

child abuse/neglect, and intimate partner violence
   g. Genetic and epigenetic risks factors for development of substance use disorders
   h. Adverse childhood experiences (ACEs) as risk factors for substance use in adolescence and adulthood
   i. Risk and prevalence of alcohol and other drug use by adolescents
   j. Recognition that substance use disorders may first come to clinical attention due to a medical complication such as an infectious disease (e.g., hepatitis C, HIV, tuberculosis, sexually transmitted infection [STI]) or organ system disease (e.g., alcohol-related liver disease)
   k. How stigma acts as a significant barrier to treatment and recovery
   l. How racism and other forms of discrimination influence biases and beliefs about substance use and addiction and create barriers to care
   m. How drug laws (e.g., harsher punishments for crack cocaine compared to powder cocaine) have worsened health disparities
   n. How different communities and populations are impacted by substance use and addiction (e.g., urban versus rural, young versus older, white people versus people of color versus Indigenous people, incarcerated versus not incarcerated) and how they are viewed or treated (e.g., compassion versus blame, offered treatment versus not offered treatment)
   o. The overdose epidemic, including waves related to prescription opioids, heroin, and fentanyl
   p. How contamination of the drug supply (primarily heroin, but also cocaine, methamphetamine, and cannabis with fentanyl and fentanyl analogs) has increased overdose deaths
   q. The impact of COVID-19 and the global pandemic on substance use and overdose deaths

4. Common psychoactive substances associated with substance use disorders, their metabolism and physiologic effects, and related withdrawal syndromes
   a. Tobacco (e.g., cigarettes, cigars, chew, dip)
   b. Other nicotine delivery systems (e.g., vapes)
   c. Alcohol
   d. Cannabis
   e. Sedative-hypnotics, including prescription medications such as benzodiazepines and barbiturates
   f. Opioids, including heroin; prescription opioids such as oxycodone, morphine, hydromorphone, methadone, and fentanyl; medications used to treat opioid use disorder (buprenorphine, methadone); and high-potency synthetic fentanyl analogs
   g. Stimulants, including amphetamines and derivatives; cocaine (powder and crack); and caffeine
   h. “Club” or designer drugs, including methylenedioxymethamphetamine (MDMA, also called Molly or Ecstasy), gamma-hydroxybutyrate (GHB), and flunitrazepam (Rohypnol)
   i. Hallucinogens, including lysergic acid diethylamide (LSD) and psylocibin

j. Anabolic steroids
k. Inhalants
l. Dissociatives, including phencyclidine (PCP), ketamine, and dextromethorphan
m. Synthetic drugs, including synthetic marijuana (e.g., K2, Spice) and cathinones (e.g., “bath salts”)
n. Kratom and related extracts
o. Other drugs common in the community served by the residency, as well as current drug use "trends"

5. Relevant concepts, including the following:
    a. Reward, tolerance, cross-tolerance, cravings, impaired control, social impairment, unhealthy use, physical dependence, psychological dependence, withdrawal, routes of administration, and physiologic effects of commonly used drugs
    b. Dose conversion for alcohol across types (e.g., beer, wine, hard alcohol) and serving size (e.g., “fifth,” “handle,” “pint”)
    c. Dose-response effect of substances and how dose is associated with risk and adverse effects (e.g., effects of alcohol on psychomotor skills, including driving)
    d. Appropriate prescribing of potentially addictive medications (including opioid analgesics, sedative-hypnotics, and stimulants) with methods of monitoring and preventing substance use disorder
    e. Risk of overdose in short-acting versus long-acting opioids and morphine milligram equivalents (MME)
    f. Effects of combining opioids with other central nervous system depressants
    g. Risks associated with opioid taper in patients with chronic opioid use and dependence
    h. Use of buprenorphine and methadone for treating opioid use disorder
    i. Use of naloxone for treating opioid overdose and recognition of impacts of half-lives for various agents (e.g., methadone) on need for monitoring and appropriate dosing
    j. Use of flumazenil for treating benzodiazepine overdose

6. Medical model of addiction, including information on the following:
    a. Use of terminology from the DSM-5, National Institute on Alcohol Abuse and Alcoholism (NIAAA), and NIDA to describe the spectrum of substance use disorders
    b. Definition of “unhealthy use” and differentiation between mild, moderate, and severe substance use disorders for various substances
    c. Evidence regarding genetic and epigenetic transmission of substance use disorders
    d. Neurochemistry, including biological markers of substance use disorders
    e. Natural history of substance use disorders, and the similarity of substance use disorders to other chronic medical diseases with fluctuating symptoms

over time
    f. Signs and symptoms of early and advanced stages of substance use disorders, including:
        i. Psychosocial and behavioral changes in the individual and the family
        ii. Symptoms, physical signs, and laboratory evidence (e.g., liver enzyme, jaundice)

7. Comorbid biomedical and psychiatric diagnoses: hypertension, diabetes, cardiovascular disease, pancreatitis, HIV, hepatitis C, tuberculosis, STIs, anxiety disorders, depression, bipolar illness, and psychotic illness

8. Prevention and effective strategies, including the following:
    a. Understanding public health concepts of primary, secondary, and tertiary prevention
        i. Primary prevention: preventing initial use (e.g., minimum age requirements to purchase alcohol/cigarettes, taxation, smoke-free spaces)
        ii. Secondary prevention: screening and early intervention (e.g., SBIRT)
        iii. Tertiary prevention: treatment of substance use disorder to reduce harms associated with substance use, restore function, and improve quality of life (e.g., maintenance medication, group therapy, peer recovery support)
    b. Prevention of recurrence of substance use disorder symptoms
        i. Risk factors for resuming substance use
        ii. Appropriate interventions, including outpatient pharmacologic treatment for overdose (e.g., naloxone)

9. Medical and psychosocial treatment modalities aligned with the patient's treatment goals and severity of substance use disorder
    a. American Society of Addiction Medicine (ASAM) levels of care
    b. Medical management of withdrawal
        i. Risk stratification
        ii. Determination of setting based on safety, local options, and patient preference
        iii. Interventions to prevent adverse outcomes from withdrawal
    c. Inpatient (residential) versus outpatient (partial hospital, intensive outpatient, relapse prevention)
    d. Medication-assisted treatment (MAT) with U.S. Food and Drug Administration (FDA)-approved medications for opioid use disorder, alcohol use disorder, or tobacco use disorder
    e. Overdose harm reduction, including prescribing and use of naloxone
    f. Harm reduction strategies, including safe use practices, safe injection practices, preexposure prophylaxis (PrEP)
    g. Individual and group psychotherapy

h. Mutual support groups (e.g., 12-step program, Alcoholics Anonymous [AA], SMART Recovery)
i. Peer recovery support
j. Case management
k. Contingency management
l. Incorporation of education into treatment and recovery
m. Facilitation of referrals and coordination of care

10. Pharmacologic treatment of overdose, withdrawal syndromes, metabolic stabilization, and maintenance therapy, including MAT

Substance	**Overdose**	**Withdrawal**	**FDA-approved MAT maintenance**
Opioids	Naloxone	Start: buprenorphine or methadone; symptomatic treatment (e.g., ondansetron, Imodium, trazodone)	Methadone (only at Opioid Treatment Programs), buprenorphine, naltrexone
Alcohol	Supportive care	Benzodiazepine taper	Naltrexone, acamprosate, or disulfiram
Sedative-hypnotics	Flumazenil	Benzodiazepine taper	No FDA-approved MAT medication
Tobacco	Supportive care	Nicotine replacement	Nicotine replacement, bupropion, varenicline
Stimulants	Supportive care	Supportive care	No FDA-approved MAT medication

11. Special considerations in prevention, diagnosis, and treatment for the following:
    a. Pregnant women
        i. Screening tools for pregnant women (e.g., 4P's Plus/5P's, CRAFFT, Drug Abuse Screening Test [DAST]-10, NIDA Quick Screen, Wayne Indirect Drug Use Screener, Substance Use Risk Profile-Pregnancy)
        ii. Medication for Opioid Use Disorder (MOUD) (e.g., methadone, buprenorphine)
        iii. Coordinated and collaborative care from a multidisciplinary team that is patient and family centered, including an addiction medicine specialist, if available
    b. Adolescents and children, including newborns

        i. Neonatal opioid withdrawal management, including Eat, Sleep, Console approach and pharmacologic treatment
        ii. Signs and symptoms of substance use in youth, including substances more commonly used by youth (e.g., vapes, inhalants)
    c. Elderly patients
    d. Patients who are homeless
        i. Housing First model recognizes mental health and substance use treatment work best when an individual has stable housing to support their recovery
    e. Incarcerated and formerly incarcerated populations
    f. Patients who have a substance use disorder and co-occurring psychiatric disorder
    g. Cultural groups represented in the patient population of the residency program's location
    h. Children in families that have a history of substance use disorders
    i. Patients with concurrent infectious diseases, including hepatitis C and HIV

Interpersonal and Communication Skills

A family medicine resident should demonstrate competency in effective communication that fosters trust and facilitates recovery and treatment engagement. At the completion of residency, a family medicine resident should be able to:

1. Use strengths-based, person-centered, recovery-oriented language with patients, with colleagues, and in the community (e.g., a person with a substance use disorder or a person who uses marijuana [not "addict" or "junkie"], a negative urine test [not "clean"], a newborn experiencing opioid withdrawal [not "addicted baby"])

2. Take a substance use history
    a. Use verbal and nonverbal communication that conveys a curious and nonjudgmental attitude
    b. Ask about substances used, route of use, amount used, frequency and duration of use, last use, tolerance, and withdrawal symptoms
    c. Ask about prior treatment and periods of recovery, what has worked and what has not, and what factors contributed to return to use

3. Elicit patient's recovery goals

4. Recognize the forms that stigma takes and work to overcome the impact stigma has on people with substance use disorders
    a. Stigma fosters blame and self-blame, erodes self-efficacy, and reduces help seeking
    b. Stigma enables discrimination and facilitates health disparities
    c. Stigma creates barriers to treatment

5. Recognize opportunities for and utilize motivational interviewing

a. Assessment of a patient's readiness to change
b. Open-ended questions, Affirmations, Reflections, Summaries (OARS)
c. Explore pros and cons of status quo versus making a change
d. Use benefits of making a change to facilitate change talk

Professionalism

At the completion of residency, a family medicine resident should be able to:

1. Model behaviors that reflect a core belief that individuals who use or have used substances, including those who have substance use disorders, and their families are to be respected, supported, and treated nonjudgmentally by their family physician

2. Understand that expressions of denial, dishonesty, anger, irrationality, and other potentially disruptive behaviors may be symptoms of a substance use disorder and should be identified, understood, accepted, and managed as such by family physicians

3. Maintain confidence that recovery from a substance use disorder is possible for most people and that there are effective treatments for addiction

4. Incorporate harm reduction strategies into practice
    a. Recognize that not all patients want to strive for complete abstinence
    b. Meet people "where they are" by assessing stage of readiness to change and applying appropriate techniques for their current stage
    c. Focus on reducing risks and harms associated with substance use rather than on abstinence
    d. Understand that changes in frequency, dose, route, and setting can alter risks and harms of substance use
    e. Understand harm reduction activities that include:
        i. Provision of naloxone to treat opioid overdose
        ii. Syringe service programs so people who inject drugs have access to sterile needles, which reduces HIV and hepatitis C transmission
        iii. Condoms to prevent STI transmission
        iv. Fentanyl test strips so people who use drugs can test for fentanyl contamination
        v. PrEP to prevent HIV transmission in high-risk individuals
        vi. Screening for and treating associated infections (e.g., hepatitis C, HIV)

Practice-Based Learning and Improvement

At the completion of residency, a family medicine resident should be able to:

- Be aware of personal biases related to substance use disorders and the potential implications of these biases in the therapeutic relationship
- Demonstrate commitment to continuous learning about substance use and

substance use disorders, and recognize that best practices evolve and current approaches may become outdated in the future

- Bring curiosity to patient encounters and learn from patients, who have much to teach
- Solicit feedback from patients and families about ways to destigmatize clinical policies and procedures, and create a safe, nonjudgmental environment for people who use substances to seek and obtain high quality care

Systems-Based Practice

At the completion of residency, a family medicine resident should be able to:

1. Obtain a Drug Abuse Treatment Act of 2000 (DATA2000) waiver from the Substance Abuse and Mental Health Services Administration (SAMHSA) to be able to prescribe buprenorphine for the treatment of opioid use disorder in an office-based setting

2. Advocate within the community for:
    a. Support and maintenance of accessible and effective local resources
    b. Development of resources to address unmet needs
    c. Policies and procedures that reduce barriers to care, such as insurance parity for substance use disorder treatment
    d. Implementation of person-centered and anti-stigma policies and procedures
    e. Application of a harm reduction approach to address substance use in clinical and community settings

3. Recognize the capacity of telehealth to expand access to care, including care for people with substance use disorders
    a. Be familiar with current laws regarding telehealth for addiction treatment, including those that pertain to buprenorphine prescribing
    b. Identify benefits of telehealth for treatment of substance use disorders, including overcoming challenges related to transportation, missed time from work, childcare, mobility concerns, and other health concerns
    c. Recognize digital poverty, how it creates barriers to care, and how to mitigate it

4. Develop clinical practices to manage prior authorizations and other requirements so patients can access treatments in a timely manner

5. Partner with clinical staff to work in multidisciplinary teams that collaborate and care for patients with substance use disorders

6. Show commitment to safe and appropriate use of opioids, stimulants, and other medications/substances with addictive potential
    a. Recognize that overprescribing, inappropriate prescribing, and

prescription drug diversion have played a significant role in drug addiction in the United States
   b. Also recognize the legitimate need and obligation to treat acute and chronic conditions appropriately in one's patient population
   c. Consider pseudo addiction in patient populations that may have untreated pain (e.g., acute injury, terminally ill)

7. Use patient monitoring tools, including prescription drug monitoring programs (PDMPs)
   a. Enroll in and utilize your state's PDMP and neighboring states' PDMPs, when allowed and when/if required
   b. Interpret information obtained from a PDMP and use it as part of an overall strategy for safety and to monitor patient use of controlled substances
   c. Recognize limitations, privacy issues, and biases in monitoring tools

8. Demonstrate ability to apply knowledge of information on identification and management of substance use disorders in health care professionals, including the following:
   a. Preventive measures, including coping strategies, stress reduction, ways to address burnout, and self-monitoring
   b. Recognition of early signs and symptoms of addiction in health care professionals
   c. Legal requirements and ethical implications for health care professionals who suspect impairment in a colleague
   d. The role of hospital-based physician health committees, state physician health programs, and state licensure boards

9. Demonstrate ability to apply knowledge of legal and ethical issues concerning the following:
   a. Confidentiality of medical records; extra protection extended by Title 42 Code of Federal Regulations (CFR) Part 2 beyond the Health Insurance Portability and Accountability Act (HIPAA)
   b. Chain of possession and informed consent for serum and urine drug testing
   c. Laws regarding driving and substance use disorders
   d. Court-appointed treatment

10. Demonstrate ability to apply knowledge of available local resources to assist in treatment and intervention for patients who have substance use disorders, taking access and cost into consideration

11. Demonstrate ability to apply knowledge of population health techniques to determine unmet needs or barriers to care related to substance use disorders in the community

12. Demonstrate ability to apply knowledge of appropriate and legal practices for storage and disposal of medications, especially those associated with nonmedical use or addiction

Implementation

This curriculum should be taught in both experiential and didactic formats. Training sites for residents should include substance use treatment programs and their own continuity practices. Other training opportunities might include interactions with community programs and groups (e.g., AA, SMART Recovery), talks with law enforcement agencies, meetings with a local harm reduction program, visits to a syringe service program, presentations from people with lived experience, and counseling sessions at addiction treatment facilities. Through exposure to outpatient, inpatient, and residential substance use treatment programs and interactions with stakeholders who work with people who have substance use disorders, residents can experience the process of recovery and gain familiarity with referral resources. With their own panel of continuity patients, residents should be able to demonstrate competence in substance use screening and assessment, intervention with families and individuals, medications for addiction treatment, and referral. Residents should also demonstrate competence in caring for families affected by substance use disorders, as well as in the primary prevention of substance use disorders, particularly for children, adolescents, and pregnant women.

Resources

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Website Resources

Academy of Perinatal Harm Reduction. https://www.perinatalharmreduction.org/

Addiction Technology Transfer Center Network (ATTC):

- Anti-Stigma Toolkit: A Guide to Reducing Addiction-Related Stigma. https://attcnetwork.org/sites/default/files/2019-04/Anti-Stigma%20Toolkit.pdf
- Building Health Equity and Inclusion. https://attcnetwork.org/centers/global-attc/clas-resources
- Focus on Stimulant Misuse. https://attcnetwork.org/centers/global-attc/focus-stimulant-misuse

Addictionary (glossary of substance use disorder terminology). https://www.recoveryanswers.org/addiction-ary/

Agency for Healthcare Research and Quality (AHRQ). Treating Tobacco Use and Dependence: 2008 Update. www.ahrq.gov/prevention/guidelines/tobacco/index.html

Alcoholics Anonymous. www.aa.org/

American Society of Addiction Medicine (ASAM):

- A Patient's Guide to Starting Buprenorphine at Home. www.asam.org/docs/default-source/education-docs/unobserved-home-induction-patient-guide.pdf?sfvrsn=16224bc2_0
- eLearning Center. https://elearning.asam.org/

Drug Policy Alliance. https://drugpolicy.org/

Institute for Research, Education, and Training in Addictions (IRETA). www.ireta.org/

- SBIRT Toolkit. https://ireta.org/resources/sbirt-toolkit/

National Harm Reduction Coalition. Harm Reduction Issues. https://harmreduction.org/issues/

National Institute on Alcohol Abuse and Alcoholism (NIAAA). Helping Patients Who Drink Too Much: A Clinician's Guide. https://pubs.niaaa.nih.gov/publications/practitioner/cliniciansguide2005/

National Institute on Drug Abuse (NIDA). www.nida.nih.gov

Providers Clinical Support System (PCSS). Substance Use Disorder (SUD) 101 Core Curriculum. https://pcssnow.org/education-training/sud-core-curriculum/

SMART Recovery. www.smartrecovery.org

Substance Abuse and Mental Health Services Administration (SAMHSA):

- Behavioral Health Treatment Services Locator. https://findtreatment.samhsa.gov/
- Mental Health and Substance Use Disorders. www.samhsa.gov/disorders/substance-use

The Trevor Project. Substance Use Disparities by Sexual Identity. www.thetrevorproject.org/2020/03/26/research-brief-substance-use-disparities-by-sexual-identity/

U.S. Department of Health and Human Services. Opioid Oral Morphine Milligram Equivalent (MME) Conversion Factors table for prescription drug coverage. www.hhs.gov/guidance/document/opioid-oral-morphine-milligram-equivalent-mme-conversion-factors-0

U.S. Preventive Services Task Force. Unhealthy Alcohol Use in Adolescents and Adults: Screening and Behavioral Counseling Interventions. www.uspreventiveservicestaskforce.org/uspstf/recommendation/unhealthy-alcohol-use-in-adolescents-and-adults-screening-and-behavioral-counseling-interventions

Apps

Digital therapy options are increasing, as are apps designed to manage symptoms. While evidence of effectiveness is variable and many apps have not been formally studied (Staiger PK, O'Donnell R, Liknaitzky P, et al. Mobile apps to reduce tobacco, alcohol, and illicit drug use: systematic review of the first decade. *J Med Internet Res*. 2020;22(11):e17156.), apps can be used as a helpful adjunct to ongoing treatment.

The reSET app (Pear Therapeutics, https://apps.apple.com/us/app/pear-reset/id1096230845), which is based on principles of cognitive behavioral therapy (CBT), has been approved by the FDA for use as an adjunct to ongoing treatment. It is a 12-week program of CBT exercises targeting thought patterns and behaviors and is available by prescription.

Other Apps

12 Steps AA Companion: Designed to provide useful resources to AA participant
www.deanhuff.com/DeanHuff/12_Steps_Companion.html

Buprenorphine Home Induction: Free app tool to assist patients initiating buprenorphine for treatment of opioid use disorder
https://amstonhealth.com/bup-home-induction/

Hazelden Betty Ford Recovery Support Apps: Listing of helpful meditation apps
www.hazeldenbettyford.org/recovery/tools/apps

I Am Sober: Designed to track sober time
https://iamsober.com/

MindShift CBT: Developed by the Anxiety Canada Association and based on CBT principles to help users manage negative thoughts and feelings that trigger anxiety symptoms
www.anxietycanada.com/resources/mindshift-cbt/

Quitzilla: Multifeatured app that provides use tracking, goal setting, and motivational tools to provide support in changing habits and behavior change
https://quitzilla.com/

Sober Grid: Free app that provides tools to manage cravings; additional (fee-based) features facilitate access to peer support coaches
www.sobergrid.com

Stop OD NYC: Free app that explains how to administer naloxone to a person who has an opioid overdose
https://apps.apple.com/us/app/naloxone-stop-od/id1208260484?ls=1

Talk About Opioids: Free app that provides a clinical practice simulation to learn and practice effective techniques to identify patients with opioid use disorders and discuss symptoms and appropriate treatment options
https://apps.apple.com/us/app/talk-about-opioids/id1391319200

VA PTSD Coach: Designed to help manage symptoms of posttraumatic stress disorder (PTSD), a frequent co-occurring condition
https://mobile.va.gov/app/ptsd-coach

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Revised 07/2015 by University of California, San Francisco (UCSF) Family & Community Medicine Residency Program
Revised 08/2016 by University of North Dakota (UND) Center for Family Medicine Bismarck Residency Program
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