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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

This Curriculum Guideline defines a recommended training strategy for family medicine residents. Attitudes, behaviors, knowledge, and skills that are critical to family medicine should be attained through longitudinal experience that promotes educational competencies defined by the Accreditation Council for Graduate Medical Education (ACGME), www.acgme.org. The family medicine curriculum must include structured experience in several specified areas. Much of the resident's knowledge will be gained by caring for ambulatory patients who visit the family medicine center, although additional experience gained in various other settings (e.g., an inpatient setting, a patient's home, a long-term care facility, the emergency department, the community) is critical for well-rounded residency training. The residents should be able to develop a skillset and apply their skills appropriately to all patient care settings.

Structured didactic lectures, conferences, journal clubs, and workshops must be included in the curriculum to supplement experiential learning, with an emphasis on outcomes-oriented, evidence-based studies that delineate common diseases affecting patients of all ages. Patient-centered care, and targeted techniques of health promotion and disease prevention are hallmarks of family medicine and should be integrated in all settings. Appropriate referral patterns, transitions of care, and the provision of cost-effective care should also be part of the curriculum.

Program requirements specific to family medicine residencies may be found on the ACGME website. 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.

Please note that the term “manage” occurs frequently in AAFP Curriculum Guidelines. “Manage” is used in a broad sense to indicate that the family physician takes responsibility for ensuring that optimal, complete care is provided to the patient. This does not necessarily mean that all aspects of care need to be directly delivered personally by the family physician. Management may include appropriate referral to other health care providers, including other specialists, for evaluation and treatment.

Each residency program is responsible for its own curriculum. **This guideline provides a useful strategy to help residency programs form their curricula for educating family physicians.**

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 abused drugs and cause the most morbidity and mortality, the growing prevalence of illicit substance use disorders, especially involving opiates, has attracted much public and governmental attention. Physicians have the responsibility to identify patients at risk for substance use disorders and initiate 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. 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.

Competencies

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

- Demonstrate respectful, nonjudgmental, and caring behaviors toward patients who have substance use disorders (Patient Care, Professionalism)
- Obtain a thorough history regarding the patient’s substance use, including questions about behaviors that may be socially unacceptable or illegal (Patient Care, Medical Knowledge, Interpersonal and Communication Skills)
- Develop and facilitate interventions and treatment plans for patients who have substance use disorders and associated comorbid conditions (Medical Knowledge, Systems-based Practice)
- Demonstrate screening, brief office intervention, and motivational interviewing techniques for patients who have substance use disorders (Patient Care, Medical Knowledge, Interpersonal and Communication Skills)
- Understand and be able to educate patients and their families about the disease model of addiction and its expected course (Medical Knowledge, Patient Care, Interpersonal and Communication Skills)

- Locate and use evidence-based resources for the diagnosis and treatment of substance use disorders (Practice-based Learning and Improvement)
- Locate available local resources to assist in treatment and intervention for patients who have substance use disorders (Patient Care, Systems-based Practice)
- Understand the contribution of physician prescribing practices for opioids, stimulants, and other potential drugs of abuse and addiction to substance use disorders (Patient Care)

Attitudes and Behaviors

The resident should demonstrate attitudes and behaviors that encompass:

- Belief that individuals who have substance use disorders and their families are to be respected, supported, and treated nonjudgmentally by their family physician
- Understanding that expressions of denial, dishonesty, anger, irrationality, and other potentially offensive behaviors are often symptoms of substance use disorders and should be expected, understood, accepted, and managed by family physicians
- Awareness of personal biases related to substance use disorders and the potential implications of these biases in the therapeutic relationship
- Confidence that substance use disorders can be treated successfully and that patients can be restored to a healthy life and lifestyle
- Commitment to safe and appropriate use of opioids, stimulants, and other potential drugs of abuse in practice in light of awareness that overprescription, inappropriate prescription, and prescription drug diversion play a significant role in drug addiction in the United States, as well as recognition of the legitimate need and obligation to treat acute and chronic conditions appropriately in one's patient population

Knowledge

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

1. Epidemiology of substance use disorders and their impact on society, including the following:
    a. Overall prevalence
    b. Risk factors for developing substance use disorders
    c. Contribution to major causes of morbidity and mortality (e.g., cardiovascular disease, cancer, cirrhosis, homicide, suicide, motor vehicle accidents, trauma, worsening psychiatric conditions, and infectious diseases)

d. Association with interpersonal and criminal problems, including crime, violence, child abuse/neglect, and intimate partner violence

e. Increased risk of substance use disorders in children of parents who have substance use disorders, for both genetic and social reasons

f. Risk and prevalence of alcohol and other drug use by adolescents

g. Recognition of risks associated with many infectious diseases (e.g., hepatitis C, HIV, tuberculosis, sexually transmitted infections [STIs])

2. Common drugs associated with substance use disorders, their physiologic effects and metabolism, and related withdrawal syndromes

   a. Tobacco

   b. Alcohol

   c. Cannabis

   d. Sedative-hypnotics, including prescription medications such as benzodiazepines and barbiturates

   e. Opioids, buprenorphine, methadone, and other prescription medications (intravenous, oral, transdermal, and transmucosal)

   f. Amphetamines and derivatives

   g. “Club” or designer drugs, including methylenedioxymethamphetamine (MDMA), gamma-hydroxybutyrate (GHB), and flunitrazepam (Rohypnol)

   h. Cocaine in all its forms

   i. Hallucinogens

   j. Anabolic steroids

   k. Inhalants

   l. Dissociatives, including phencyclidine (PCP), ketamine, dextromethorphan, and caffeine

   m. Synthetic drugs, including synthetic marijuana (e.g., 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"

3. Relevant pharmacology, including the following:

   a. Concepts of tolerance, cross-tolerance, cravings, impaired control, social impairment, risky use, physical dependence, psychological dependence, withdrawal, routes of administration, and physiologic effects of commonly used drugs

b. Pharmacologic equivalents of various alcoholic beverages and the dose-response effect of alcohol on psychomotor skills, including driving

c. Presence of alcohol in commonly used medications

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. Use of suboxone and methadone for treating opioid use disorders

h. Use of naloxone and other antidotes for treating overdose

4. Disease concept of substance use disorders, including information on the following:

   a. Use of terminology from the *Diagnostic and Statistical Manual of Mental Disorders,* 5th Edition *(*DSM-5*)*, National Institute on Alcohol Abuse and Alcoholism (NIAAA), and National Institute on Drug Abuse (NIDA) to describe the spectrum of substance use disorders

   b. Definitions of “at risk use” and differentiation between mild, moderate, and severe substance use disorders for various substances

   c. Evidence regarding genetic transmission and neurochemistry, including markers of substance use disorders

   d. Natural history of substance use disorders, and the similarity of substance use disorders to other chronic medical diseases with relapsing and remitting courses

   e. 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., chronic liver disease, track marks)

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

5. General knowledge of various screening/diagnostic tools, including the following:

   a. Prescreening tools (e.g., NIDA Quick Screen, AUDIT-C, CRAFFT)

   b. Full screening tools (e.g., NIDA, AUDIT, CAGE)

   c. Utilization of screening tools for hepatitis C in high-risk individuals

   d. Structured interview protocols

   e. Techniques for responding to a positive screening tool result (e.g., motivational interviewing)

f. Clinical indications for drug testing, as well as selection and interpretation of alcohol and other drug tests, including the following:
    i. Illicit drug toxicology
    ii. Blood alcohol levels
    iii. Chronic pain management screening and testing

6. Prescription drug monitoring programs (PDMPs), including the following:

    a. How to gain access to your state's PDMP and neighboring states' PDMPs, when allowed and appropriate

    b. How to appropriately use a PDMP to monitor for appropriate patient use of controlled substances

7. Prevention strategies and their effectiveness, including the following:
    a. Understanding of primary, secondary, and tertiary prevention strategies
    b. Initial-use prevention
    c. Relapse prevention
        i. Symptoms and signs of impending relapse
        ii. Appropriate interventions, including outpatient pharmacologic treatment for overdose (e.g., naloxone)
    d. Prevention of hazardous use through the Screening, Brief Intervention, and Referral to Treatment (SBIRT) model

8. Psychosocial treatment modalities appropriate to current stage of disease
    a. Assessment of a patient's readiness to change
    b. Utilization of behavioral change models based on patient readiness to change
    c. Advantages and disadvantages of various treatment modalities (e.g., 12-step programs, professional psychotherapy, inpatient/outpatient treatment programs)
    d. Appropriate use of educational tools during treatment
    e. Facilitation of referrals to treatment options and coordination of care

9. Pharmacologic treatment of overdose, withdrawal syndromes, detoxification, and maintenance, including medication-assisted treatment
    a. Opioids, including use of long-acting opioids such as methadone and naltrexone for maintenance, naloxone for overdose, and medication-assisted treatment of opioid addiction with buprenorphine
    b. Alcohol, including use of disulfiram, naltrexone, gabapentin, and acamprosate for maintenance
    c. Sedative-hypnotics
    d. Tobacco, including use of nicotine replacement, bupropion, and varenicline

10. Special considerations in prevention, diagnosis, and treatment for the following:
    a. Pregnant women
        i. Screening tools for pregnant women (e.g., TWEAK, T-ACE)
        ii. Opioid maintenance treatment (e.g., methadone and buprenorphine)
        iii. Opioid overdose, including outpatient treatment with naloxone
        iv. Alcohol medication-assisted treatment
        v. Treatment of withdrawal syndromes
    b. Adolescents and children, including newborns
    c. Elderly patients
    d. Patients who are homeless
    e. Patients who have a psychiatric disorder, including patients who have a dual diagnosis
    f. Cultural groups represented in the patient population of the residency program's location
    g. Children in families that have a history of substance use disorders
    h. Patients who have chronic infectious diseases, including hepatitis C and HIV
11. Information on health care professional impairment, including the following:
    a. Preventive measures, including coping strategies, stress reduction, 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 impaired-physician committees, state impaired-physician programs, and state licensure boards
12. 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
13. Available local resources to assist in treatment and intervention for patients who have substance use disorders, taking access and cost into consideration
14. Population health techniques to determine unmet needs related to substance use disorders in the community

15. Awareness of the warning signs of potentially inappropriate requests for and use of controlled substances in the patient population

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

17. Knowledge of appropriate and legal practices for storage and disposal of common drugs associated with abuse or addiction

Skills

In the appropriate setting, the resident should demonstrate the ability to independently perform the following skills:

1. Apply prevention strategies for substance use disorders
    a. Provide primary prevention with the SBIRT model for tobacco, alcohol, and other drug use problems for all patients
    b. Advocate within the community for:
        i. Support and maintenance of effective local resources
        ii. Development of resources to address unmet needs

2. Utilize appropriate diagnostic tools to screen all patients for substance use disorders

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

4. Assess readiness to change in all patients who have substance use disorders

5. Treat substance use disorders using the following:
    a. Office-based brief interventions (e.g., secondary prevention, abstinence, harm reduction, or referral 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 in assessment and initial treatment
    e. Ongoing monitoring to help the patient and family achieve desirable outcomes and recognize signs of relapse
    f. Pharmacotherapy and medical management of acute overdose, detoxification, withdrawal syndromes, and maintenance, including medication-assisted treatment

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

7. Recognize and address common medical comorbidities

8. Manage acute and chronic pain that involves the use of opioid analgesics with the following:

    a. Appropriate monitoring parameters

    b. Strategies that minimize the risk of addiction

    c. Appropriate specialty referral for patients who have a history of substance use disorders

    d. Outpatient naloxone treatment for chronic opioid users

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 such as Alcoholics Anonymous (AA), talks with law enforcement agencies, and counseling sessions at addiction treatment facilities. Through exposure to outpatient, inpatient, and residential substance abuse treatment programs, 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, 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

Addiction Search. www.addictionsearch.com/treat_app.php

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

Alcoholics Anonymous. www.aa.org/

Centers for Medicare & Medicaid Services (CMS). Opioid Morphine Equivalent Conversion Factors. www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovContra/Downloads/Opioid-Morphine-EQ-Conversion-Factors-March-2015.pdf

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

IRETA. SBIRT (Screening, Brief Intervention, and Referral to Treatment) 101. www.ireta.org/improve-practice/addiction-professionals/online-courses/sbirt-101/

National Institutes of Health (NIH) National Institute on Alcohol Abuse and Alcoholism (NIAAA). Helping Patients Who Drink Too Much: A Clinician's Guide. www.niaaa.nih.gov/guide

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

Substance Abuse and Mental Health Services Administration (SAMHSA):

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

U.S. Preventive Services Task Force. Alcohol Misuse: Screening and Behavioral Counseling Interventions in Primary. May 2013. www.uspreventiveservicestaskforce.org/uspstf/uspsdrin.htm

Apps

The following apps are designed to help patients with addiction recovery:

- A-CHESS
- recoveryBox
- Sober Grid
- 12 Steps AA Companion
- WeConnect
- Addicaid
- IMQuit

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Revised 06/2011 by UPMC McKeesport Family Medicine Residency Program
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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