Recommended Curriculum Guidelines for Family Medicine Residents

Substance Use Disorders

This document was 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 to patients who have substance use disorders (Patient Care, Professionalism)
- Obtain a thorough history regarding the patient’s substance use; the history may include 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 (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)

**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 his or her own biases toward substance use disorders and the potential implications of these attitudes in the therapeutic relationship
- Confidence that substance use disorders can be treated successfully, and patients can be restored to a healthy life and lifestyle

**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:
   
   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, infectious diseases)
   
   d. Association with family dysfunction, including child abuse and intimate partner violence
   
   e. Association with crime and violence
   
   f. Increased risk of substance use disorders in children of parents who have substance use disorders
   
   g. Risks and prevalence of alcohol and other drug use in adolescents

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), Rohypnol, ketamine, and dextromethorphan
h. Cocaine in all its forms
i. Hallucinogens
j. Anabolic steroids
k. Inhalants
l. PCP
m. Synthetic drugs, including synthetic marijuana (e.g., Spice) and cathinones (“bath salts”)

n. Other drugs common in the community served by the residency, as well as awareness of current drug use "trends"

3. Relevant pharmacology, including:

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. What constitutes the “standard drink” for different alcoholic beverages and what constitutes “at-risk” drinking
d. Presence of alcohol in commonly used medications
e. Appropriate prescribing of potentially addictive medications (including opioid analgesics, sedative-hypnotics, and stimulants) with methods of monitoring and prevention of substance use disorder
f. Risk of overdose in short-acting versus long-acting opioids
g. Effects of combining opioids with other central nervous system depressants
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 and differentiation between mild, moderate, and severe substance use disorders

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

d. The 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, HIV, hepatitis C, pancreatitis, anxiety disorders, depression, bipolar illness

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

a. Prescreening tools (e.g., NIDA Quick Screen, Alcohol Use Disorders Identification Test–Consumption [AUDIT-C], CRAFFT [Car, Relax, Alone, Forget, Friends, Trouble])

b. Full screening tools (e.g., NIDA, AUDIT, CAGE [Cut down, Annoyed, Guilty, Eye opener])

c. Structured interview protocols

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

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

6. Prevention strategies and their effectiveness, including:

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

7. Appropriate psychosocial treatment modalities appropriate to current stage of disease
   a. Assessment of a patient’s readiness to change
   b. Utilizing 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

8. 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, and acamprosate for maintenance
   c. Sedative hypnotics
   d. Tobacco, including use of nicotine replacement, bupropion, and varenicline

9. Special considerations in the prevention, diagnosis, and treatment of:
   a. Pregnant women
      i. Screening tools for pregnant women (e.g., TWEAK and 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
   d. Homeless
   e. Patients who have psychiatric disorders, including dual-diagnosis patients
   f. Cultural groups represented in the residency program location’s patient population
   g. Children in families with a history of substance use disorders

10. Information on health care professional impairment including:
    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

11. Legal and ethical issues concerning:


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

12. Available local resources to assist in treatment and intervention for patients who have substance use disorders

13. Population health techniques to determine the unmet needs regarding substance use disorders in the resident’s community

**Skills**

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

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. Perform community advocacy 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:
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 to recognize signs of relapse
f. Pharmacotherapy and medical management of acute overdose, detoxification, withdrawal syndromes, and maintenance, including medication-assisted treatment

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

7. Manage (including use of opioid analgesics) acute and chronic pain with:
   a. Appropriate monitoring parameters
   b. Strategies that minimize the risk of addiction
   c. Appropriate specialty referral for patients with 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 areas might include community programs, 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, 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


**Website Resources**


Alcoholics Anonymous. [www.aa.org/](http://www.aa.org/)


National Institute on Alcohol Abuse and Alcoholism. www.niaaa.nih.gov


Substance Abuse and Mental Health Services Administration (SAMHSA):

- Substance Use Disorders. www.samhsa.gov/disorders/substance-use


Published 10/1990
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Revised 01/2009
Revised 6/2011 by UPMC McKeesport Family Medicine Residency
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