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Recommended Curriculum Guidelines for Family Medicine Residents

Substance Use Disorders

This document was endorsed by the American Academy of Family Physicians (AAFP), the Association of Departments of Family Medicine (ADFM), the Association of Family Medicine Residency Directors (AFMRD), and the Society of Teachers of Family Medicine (STFM).

Introduction

This Curriculum Guideline defines a recommended training strategy for family medicine residents. Topic competencies, attitudes, 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) http://www.acgme.org. The curriculum must include structured experience in several specified areas. Most of the resident's knowledge will be gained by caring for ambulatory patients who visit the family medicine center. Structured didactic lectures, conferences, journal clubs, and workshops must be included in the curriculum with an emphasis on outcomes-oriented, evidence-based studies that delineate common and chronic diseases affecting patients of all ages. Targeted techniques of health promotion and disease prevention are hallmarks of family medicine. Appropriate referral patterns and 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 Web site. Current AAFP Curriculum Guidelines may be found online at http://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.

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 and abuse is a common cause of mortality and morbidity, Alcohol and tobacco abuse and other drug problems are as prevalent as diabetes, asthma, cholesterol disorders, and hypertension. Although abuse of other drugs often attracts more public attention, tobacco and alcohol continue to be the most commonly abused drugs and cause the most morbidity and mortality. Physicians have the potential and responsibility to identify patients who are at risk for substance use disorders or who use substances in a hazardous manner, and patients who have abuse or dependency problems in order to 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. These curriculum guidelines are intended to assist family medicine residency faculty in establishing educational programs that will provide family physicians with clinical competence in the treatment of substance use disorders.

Competencies

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

- Demonstrate respectful, nonjudgmental, and caring behaviors toward patients who have substance use disorders. (Patient Care, Professionalism)
- Be able to obtain a thorough history regarding the patient's substance use. History may include questions about behaviors that may be socially unacceptable or illegal. (Patient Care, Medical Knowledge, Interpersonal and Communication Skills)
- Be able to develop and facilitate interventions and treatment plans for patients who have substance use problems. (Medical Knowledge, Systems-based Practice)
- Demonstrate screening, brief office intervention, and motivational interviewing techniques for patients with substance abuse 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)
- Be able to locate and use evidence-based resources for the diagnosis and treatment of substance abuse. (Practice-based Learning and Improvement)

Attitudes

The resident should demonstrate attitudes that encompass:

- A belief that individuals and families who have substance use disorders are to be respected, supported, and treated nonjudgmentally by their family physicians. An understanding that expressions of denial, dishonesty, anger, irrationality, and other potentially offensive behaviors are often inherent symptoms of substance use

disorders, and should be expected, understood, accepted, and managed by family physicians.

- An awareness of their own attitudes toward substance abuse and their potential implications in the therapeutic relationship
- An assurance that substance abuse can be treated successfully and patients restored to a healthy life and lifestyle.

Knowledge

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

1. The epidemiology of substance use disorders and their impact on society, including:
    a. Overall prevalence of hazardous use and dependence
    b. Risk factors for substance abuse and dependence
    c. Contribution to major causes of morbidity and mortality by age groups, such as cardiovascular disease, cancer, hepatitis, cirrhosis, homicide, suicide, motor vehicle accidents, trauma, acquired immune deficiency syndrome (AIDS), and other infections including sexually transmitted diseases.
    d. Association with family dysfunction, including child and spousal abuse, violence, and crime
    e. Risks to children and adolescents who have parents who abuse alcohol and other drugs and the prevalence in society
    f. Risks of alcohol and other drug use by adolescents and the prevalence in society
2. Commonly abused drugs, 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, iv, oral, transdermal, and transmucosal
    f. Amphetamines
    g. “Club” or designer drugs, including methylenedioxymethamphetamine (MDMA), gamma-Hydroxybutyric acid (GHB), rohypnol, ketamine, and dextromethorphan
    h. Cocaine in all its forms
    i. Hallucinogens

j. Anabolic steroids
k. Inhalants
l. PCP
m. 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, physical dependence, psychological dependence, addiction, and withdrawal
   b. Use of DSM-IV, NIAAA, and NIDA terminology to describe the spectrum of substance abuse disorders
   c. Definitions and differentiation of use, misuse, at risk use, abuse, addiction, and habituation
   d. Routes of administration and physiologic effects of commonly abused drugs
   e. Pharmacologic equivalents of various alcoholic beverages and the dose-response effect of alcohol on psychomotor skills, including driving
   f. What constitutes the “standard drink” for different alcoholic beverages and what constitutes “at-risk” drinking
   g. Presence of alcohol in commonly used medications
   h. Appropriate prescribing of potentially addictive medications, including opioid analgesics, sedative-hypnotics, and stimulants with methods of monitoring and prevention of diversion, abuse, and addiction

4. The disease concept of substance use disorders, including information on:
   a. Criteria for distinguishing substance use along a spectrum from abstinence, low-risk use, hazardous use, and dependence to end-stage addiction, all of which are influenced by cultural norms
   b. Evidence regarding genetic transmission and neurochemistry, including markers of the disease
   c. The natural history of substance use disorders and the similarity of substance use disorders to other chronic medical diseases with relapsing and remitting courses
   d. 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)
      iii. Co-morbid biomedical and psychiatric diagnoses: Anxiety disorders, depression, bipolar illness, hypertension, diabetes, hepatitis C, pancreatitis

5. The validity of and sensitivities and specificities of various screening / diagnostic tools, including:
    a. AUDIT-C to screen for hazardous use
    b. DAST, CAGE, TWEAK, CRAAFT, ASSIST, and AUDIT to screen for dependence / addiction
    c. The structured interview in the absence of an available standard screening instrument
    d. An appropriate reaction to a negative screening
    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

6. Prevention strategies and their effectiveness, including:
    a. An understanding of prevention strategies, which may be primary (attempt to dissuade patient from starting substance use), secondary (attempt to curb early substance use before organic disease begins), and tertiary (attempt to minimize the consequences of existing organic substance use disease)
    b. The different models of behavior change and the assessment of a patient's readiness to change
    c. Prevention of hazardous use using the Screening, Brief Intervention & Referral to Treatment (SBIRT) model, including:
        i. Brief office interventions, FRAMES model
        ii. Scheduled interventions
        iii. Basic motivational interviewing techniques

7. Psychosocial treatment at different stages of the disease and the relevant goals of treatment at each stage
    a. The potential advantages and disadvantages of various treatment modalities including:
        i. Intensive office interventions using motivational interviewing
        ii. Lay, self-help groups for persons who have a substance use disorder and for their families (e.g., 12-step programs)
        iii. Professionally administered psychotherapy for individuals, families, and groups
        iv. Intensive outpatient / partial day treatment programs
        v. Inpatient treatment programs
        vi. Partial residential programs, including day programs and half-way houses
    b. The use of informational brochures and educational tools during the intervention
    c. Facilitating referrals to various treatment options
    d. Outcomes of different treatment modalities (e.g., harm reduction, abstinence-based programs, family systems)

e. An effective and acceptable follow-up plan

f. Symptoms and signs of impending relapse and appropriate interventions
    i. Pharmacologic treatment, including management of withdrawal, pharmacotherapy of addiction, and treatment for coexisting biomedical and psychiatric disorders
    ii. Pharmacologic and group treatment of nicotine addiction

8. Pharmacologic treatment of withdrawal syndromes and maintenance, risks, and benefits:
    a. Opioids: including use of methadone, buprenorphine, and clonidine for withdrawal and maintenance
    b. Alcohol: including use of disulfiram, naltrexone, and acamprosate for maintenance
    c. Sedative hypnotics: including weaning techniques
    d. Tobacco: including use of nicotine replacement, bupropion, and varenicline

9. Special considerations in the prevention, diagnosis, and treatment of:
    a. Pregnant women
    b. Children and adolescents
    c. Elderly
    d. Homeless
    e. Psychiatric disorders including dual diagnosis patients
    f. Cultural groups represented in the patient population where the residency program is located
    g. Children in families with a history of alcohol and / or substance abuse disorders

10. Family / caregiver diversion in palliative and hospice situations Family dynamics, including:
    a. Dynamics of families in which one or two parents have a substance use disorder
    b. Dynamics of families in which a child or adolescent has a substance use disorder
    c. Possible psychosocial effects on adults who were raised in families with substance use disorders
    d. Enabling behavior

11. Information on health professional impairment, including:
    a. Preventive measures, including coping strategies, stress reduction, and self-monitoring
    b. Legal requirements and ethical implications for health professionals who suspect impairment in a colleague

c. The role of hospital-based impaired-physician committees, state impaired-physician programs, and state licensure boards

12. Legal and ethical issues concerning:
    a. Confidentiality of medical records – Title 42 Code of Federal Regulations part 2 extends extra protection beyond 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. Knowledge of local resources and unmet needs in the community

Skills

In the appropriate setting, the resident should demonstrate the ability to independently perform or appropriately refer:

1. Substance abuse prevention strategies
    a. Providing primary prevention with the SBIRT model for tobacco, alcohol, and drug use problems for all patients
    b. Community advocacy
        i. Support and maintenance of effective local resources
        ii. Advocate for resources to address unmet needs

2. Utilize appropriate tools to screen all patients for tobacco, alcohol, and other drug use

3. Assess patients for:
    a. Social, psychological, and physical problems if screening results are positive for hazardous substance use or abuse, or for dependence of tobacco, alcohol, or other drugs
    b. Readiness to change in all patients with hazardous or dependent use of tobacco, alcohol, or other drugs

4. Treatment of substance abuse disorders
    a. Office-based brief intervention
        i. With a goal of secondary prevention in persons with hazardous drinking but without symptoms and signs of alcohol dependence
        ii. With a goal of abstinence, harm reduction, or referral for further treatment in patients who have alcohol or other drug dependence
    b. Permission is needed from the patient to proceed with a brief intervention

c. Appropriate documentation and coding for a brief intervention
d. Motivational interviewing to facilitate behavior changes
e. Inclusion of family in assessment and initial treatment
f. Pharmacotherapy and medical management of withdrawal syndrome
g. Pharmacotherapy and medical management of maintenance, including the use of office-based buprenorphine maintenance, and disulfiram, naltrexone, and acamprosate maintenance

5. Referral to specialized treatment programs and other community resources
   a. Consultation with and referral to specialized treatment programs
   b. Consultation with and referral to community tobacco, alcohol, and drug treatment programs
   c. Work with and referral to self-help programs for tobacco, alcohol, and other drug problems
   d. Perform ongoing monitoring to help the patient and family achieve desirable outcomes
   e. Recognize symptoms and signs of relapse and engage patients and families in additional treatment

6. Management of acute and chronic pain, including appropriate use of opioid analgesics, while minimizing the risk of addiction
   a. In hospitalized and ambulatory settings
   b. In patients with and without a history of substance use disorders
   c. In patients on methadone or buprenorphine maintenance

Implementation

This curriculum should be taught in both experiential and didactic formats. Training sites for residents should include substance abuse treatment programs and their own continuity practices. Other areas might include community programs, groups such as AA, talks with law enforcement agencies and participation in 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 abuse screening, assessment, intervention with families and individuals, and referral. Residents should also demonstrate competence in caring for families affected by substance use disorders and in the primary prevention of substance use disorders, particularly for children, adolescents, and pregnant women.

Resources

Anderson CE, Loomis GA. Recognition and prevention of inhalant abuse. *Am Fam Physician.* 2003;68(5):869-74, 876.

Comerci GD, Schwebel R. Substance abuse: an overview. *Adolesc Med* 2000;11:79-101.

Donaher PA, Welsh C. Managing opioid addiction with buprenorphine. *Am Fam Physician.* 2006;73(9):1573-8.

Enoch MA, Goldman D. Problem drinking and alcoholism: diagnosis and treatment. *Am Fam Physician*. 2002;65(3):441-9.

Gahlinger PM. Club drugs: MDMA, gamma-hydroxybutyrate (GHB), rohypnol, and ketamine. *Am Fam Physician*. 2004;69(11):2619-7.

Giannini AJ. An approach to drug abuse, intoxication and withdrawal. *Am Fam Physician*. 2000;61(9):2763-74.

Griswold KS, Arnoff H, Kernan JB, et al. Adolescent substance use and abuse: recognition and management. *Am Fam Physician.* 2008;77(3):331-336.

Jenkinson DM, Harbert AJ. Supplements and sports. *Am Fam Physician.* 2008;78(9):1039-1046.

Jones EM, Knutson D, Haines D. Common problems in patients recovering from chemical dependency. *Am Fam Physician*. 2003;68(10):1971-9.

Knight JR, Harris SK, Sherritt L, et.al. Prevalence of positive substance abuse screen results among adolescent primary care patients. *Arch Pediatr Adolesc Med*. 2007;161(11):1035-1041.

Longo LP, Johnson B. Addiction part I: benzodiazepines – side effects, abuse risk and alternatives. *Am Fam Physician.* 2000;61(7):2121-8.

Longo LP, Parran T, Johnson B, et al. Addiction part II: identification and management of the drug seeking patient. *Am Fam Physician*. 2000;61(8):2401-08.

Mersy DJ. Recognition of alcohol and substance abuse. *Am Fam Physician.* 2003;67(7):1529-32, 1535-6.

Miller NS, Gold MS. Management of withdrawal syndromes and relapse prevention in drug and alcohol dependence. *Am Fam Physician.* 1998;58(1):139-46.

Okuyemi KS, Nollen NL, Ahluwalia JS. Interventions to facilitate smoking cessation. *Am Fam Physician*. 2006;74(2):262-71, 276.

Pomm HA, Pomm RM. *Management of the Addicted Patient in Primary Care*. New York, NY: Springer; 2007.

Prater CD, Miller KE, Zylstra RG. Outpatient detoxification of the addicted or alcoholic patient. *Am Fam Physician.* 1999;60(4):1175-83.

Pretorius RW, Zurick GM. A systematic approach to identifying drug-seeking patients. *Fam Pract Manag.* 2008;15(4):A3-A5.

Rollnick S, Mason P, Butler C. *Health Behavior Change: A Guide for Practitioners*. Edinburgh, Sct: Churchill Livingstone; 1999.

Solberg LI, Maciosek MV, Edwards NM. Primary care intervention to reduce alcohol misuse ranking its health impact and cost effectiveness. *Am J Preventive Med.* 2008;34(2):143-152.e3.

Standridge JB, Adams SM, Zotos AP. Urine drug screening: a reliable office procedure. *Am Fam Physician*. 2010;81(5):635-640.

Williams SH. Medications for treating alcohol dependence. *Am Fam Physician*. 2005;72(9):1775-80.

Willlis DR, Eaton G, MacKie P. A proactive approach to controlled substance refills. *Fam Pract Manag.* 2010;17(6):22-27.

Winslow BJ, Voorhees KI, Pehl KA. Methamphetamine abuse. *Am Fam Physician*. 2007;76(8):1169-1174.

U.S. Department of Health and Human Services, National Institute on Alcohol Abuse and Alcoholism. 10th special report to the U.S. Congress on alcohol and health. Washington, D.C: U.S. Department of Health and Human Services; 2000. http://pubs.niaaa.nih.gov/publications/10report/intro.pdf.

U.S. Department of Health and Human Services, National Institute on Drug Abuse. Drug abuse prevention through family interventions. Rockville, Md: National Institute on Drug Abuse, Division of Epidemiology and Prevention Research; 1998. NIH Publication No. 97-4135 1998. http://www.nida.nih.gov/pdf/monographs/Monograph177/Monograph177.pdf.

Yancey JR, McKinnon HD. Reaching out to an impaired physician. *Fam Pract Manag*. 2010;17(1):27-31.

Website Resources

AddictionSearch. http://www.addictionsearch.com/treat_app.php

Alcoholics Anonymous. http://www.alcoholics-anonymous.org

Department of Health Bureau of Drug & Alcohol Programs, Commonwealth of Pennsylvania, Screening, Brief Intervention, Referral and Treatment (PA-SBIRT). http://www.ireta.org/sbirt/

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

National Institutes of Health, National Institute on Alcohol Abuse and Alcoholism. http://www.niaaa.nih.gov

National Institutes of Health, National Institute on Drug Abuse (NIDA). http://www.nida.nih.gov

U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality, Treating Tobacco Use and Dependence Pathfinder. http://www.ahrq.gov/path/tobacco.htm

U.S. Department of Health and Human Services, Substance Abuse & Mental Health Services Administration (SAMHSA), Substance Abuse Treatment Facility Locator. http://findtreatment.samhsa.gov/

U.S. Preventive Services Task Force (USPSTF). Screening and Behavioral Counseling Interventions in Primary Care to Reduce Alcohol Misuse: Recommendation Statement. 2004. http://www.uspreventiveservicestaskforce.org/uspstf/uspsdrin.htm

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