The Family Medicine Clerkship Curriculum

Introduction

Family medicine is an essential component of the primary care infrastructure of the US health care delivery system. This primary care specialty provides first contact, ongoing, and preventive care to all patients regardless of age, gender, culture, care setting, or type of problem. Family medicine clinical experiences allow students to understand how context influences the diagnostic process and management decisions. Students learn the fundamentals of an approach to the evaluation and management of frequently occurring, complex, concurrent, and ill-defined problems across a wide variety of acute and chronic presentations.

Every medical student should have a third-year family medicine clerkship in addition to any earlier primary care experiences. Experiential learning in primary care and the principles and methods of family medicine provides essential patient care knowledge and skills necessary for generic medical school development, regardless of ultimate career choice. By the third year of training, students should have developed the basic skills and cognitive structures required to understand the content of a family medicine clerkship and the role of family physicians in delivering this type of care. Family medicine clerkships across the country provide a wide variety of educational experiences, due to the breadth of care provided by family physicians. In a positive sense, this breadth gives clerkship directors the autonomy to address regional variation in prevalence of diseases, supplement areas of need in their medical schools' curriculum, and infuse content with their faculty's preferences. These curricular differences, however, also limit the ability to consistently describe the clerkship's unique contributions to the medical school's curriculum and to provide focus for national subject examinations and national curriculum resource materials.

To address these limitations, the Society of Teachers of Family Medicine 2008–2009 president, Scott Fields, MD, MHA, convened a task force to define the objectives and conditions for a core family medicine clerkship curriculum. Through an iterative process of meetings and feedback, the task force developed a list of common and important patient problems frequently encountered in the family medicine office. This document can serve as a guide for clerkship directors and describes a minimum standard training experience that could be linked to a national subject examination and supported by national resource materials. The task force includes members of the Association of Departments of Family Medicine, the Association of Family Medicine Residency Directors, the American Academy of Family Physicians, the Family Medicine Curriculum Resources project, and fmCASES—a set of virtual patient cases.

This document, the Family Medicine Clerkship Curriculum, is a set of learning objectives and common conditions tied to one of three types of office visits—patients presenting for acute, chronic, or preventive care. It is not a list of all possible patient presentations that family physicians competently manage. In addition, although we address complexity, including patients with multiple concerns, various psychosocial issues, and different, sometimes conflicting behaviors that influence their health and health care, the task force did not attempt to capture this complexity. Clerkship directors must weave some of this content into the curriculum as appropriate for their individual medical school curricula, students, and times of the year.

In addition to the acquisition of content knowledge, students should also build skills during the family medicine clerkship. In most family medicine clerkships, less than 50% of the student's grade is based on a knowledge assessment. The Family Medicine Clerkship Curriculum includes historical assessment, physical examination, communication, and critical thinking and decision-making skills.

Teaching these skills involves hands-on training, and assessing these skills requires observation. Students usually come to the clerkship with prior instruction in basic physical examination skills. Students learn advanced physical examination skills and how to interpret physical examination findings during the entirety of clinical training—not just in the family medicine clerkship. However, based on the prevalence of musculoskeletal conditions seen in the family physician's office, the task force believes that the family medicine

clerkship should teach and assess the musculoskeletal examination specifically in addition to global physical examination skills. Several developmentally appropriate skills in communication and clinical reasoning are also included because of the key nature of these skills in family medicine.

This document is divided into clerkship goals and objectives; student learning objectives; principles of family medicine; overview of office visits; core presentations for acute, chronic, and preventive care; and the role of family medicine. Within many of these sections are key messages and student learning objectives. Additional topic-specific objectives can be found in the tables. Following many of the objectives, we include a designation for the corresponding ACGME competency. These appear as abbreviations in parentheses for the competencies of problem-based learning and improvement (PBLI), professionalism (PR), and systems-based practice (SBP). We did not highlight the remaining competences of medical knowledge, patient care, and interpersonal communication because we believe that all objectives incorporate these aspects.

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Clerkship Goal and Objectives

The overall goal of the family medicine clerkship is to provide an outstanding learning experience for all medical students.

The objectives of a family medicine clerkship are:

- Demonstrate the unequivocal value of primary care as an integral part of any health care system.
- Teach an approach to the evaluation and initial management of acute presentations commonly seen in the office setting.
- Teach an approach to the management of chronic illnesses that are commonly seen in the office setting.
- Teach an approach to conducting a wellness visit for a patient of any age or gender.
- Model the principles of family medicine care.
- Provide instruction in historical assessment, communication, physical examination, and clinical reasoning skills.

Student Learning Objectives for the Family Medicine Clerkship

At the end of the family medicine clerkship, each student should be able to:

- Discuss the principles of family medicine care.
- Gather information, formulate differential diagnoses, and propose plans for the initial evaluation and management of patients with common presentations.
- Manage follow-up visits with patients having one or more common chronic diseases.
- Develop evidence-based health promotion/disease prevention plans for patients of any age or gender.

- Demonstrate competency in advanced elicitation of history, communication, physical examination, and critical thinking skills.
- Discuss the critical role of family physicians within any health care system.

Principles of Family Medicine

The family medicine method of delivering health care was developed in the late 1960s at the inception of the specialty. The specialty embraced continuity and comprehensiveness and placed an emphasis on the patient's perspective within the context of family and community. These concepts were echoed in the Future of Family Medicine document published in 2004. Most recently, these principles are embodied within the concept of the Patient-centered Medical Home. Medical students should learn this method of care, study our philosophy of practice, and observe our passion for our work.

Teaching in family medicine clerkships should focus on the five primary principles of family medicine as captured in the Family Medicine Curriculum Resource project, shown in Table 1.

Table 1

The Principles of Family Medicine

The biopsychosocial model
Comprehensive care
Contextual care
Continuity of care
Coordination/complexity of care

The following student learning objectives can be incorporated into teaching of particular disease states or presenting complaints, or they can be taught independently as family medicine principles.

Student Learning Objectives for the Principles of Family Medicine

Biopsychosocial model

Patient-centered communication skills

- Demonstrate active listening skills and empathy for patients.
- Demonstrate setting a collaborative agenda with the patient for an office visit.
- Demonstrate the ability to elicit and attend to patients' specific concerns.
- Explain history, physical examination, and test results in a manner that the patient can understand.
- Clarify information obtained by a patient from such sources as popular media, friends and family, or the Internet.
- Demonstrate validation of the patient's feelings by naming emotions and expressing empathy.
- Effectively incorporate psychological issues into patient discussions and care planning.
- Use effective listening skills and empathy to improve patient adherence to medications and lifestyle changes.

- Describe the treatment plans for prevention and management of acute and chronic conditions to the patient.
- Reflect on personal frustrations, and transform this response into a deeper understanding of the patient's and one's own situation, when patients do not adhere to offered recommendations or plans.

Psychosocial awareness

- Discuss why physicians have difficulty in situations such as patients' requests for disability documentation, non-adherence, and chronic narcotic use.
- Discuss the influence of psychosocial factors on a patient's ability to provide a history and carry out a treatment plan.

Patient education

- Discuss mechanisms to improve adherence to and understanding of screening recommendations.
- Provide patient education tools taking into account literacy and cultural factors (eg, a handout on how to read nutrition labels).
- Describe the patient education protocols and programs for core chronic illnesses at their assigned clerkship sites.
- Identify resources in a local practice community that support positive health outcomes for diverse patients and families.
- Promote the use of support groups and other community resources in the area of mental health.
- Identify resources for patients with substance abuse problems at their clinic sites (eg, lists of treatment referral centers, self-help groups, substance abuse counselors, etc).

Comprehensive Care

Information gathering and assessment

- Use critical appraisal skills to assess the validity of resources.
- Formulate clinical questions important to patient management and conduct an appropriate literature search to answer clinical questions.
- Use evidence-based medicine (EBM) to determine a cost-effective use of diagnostic imaging in the evaluation of core, acute presentations.
- Find and use high-quality Internet sites as resources for use in caring for patients with core conditions.

Lifelong learning

- Assess and remediate one's own learning needs.
- Describe how to keep current with preventive services recommendations.

Contextual Care

Person in context of family

- Conduct an encounter that includes patients and families in the development of screening and treatment plans.
- Demonstrate caring and respect when interacting with patients and their families even when confronted with atypical or emotionally charged behaviors.
- Demonstrate interpersonal and communication skills that result in effective information exchange between patients of all ages and their families.

Person in context of community

- Discuss local community factors that affect the health of patients.
- Discuss health disparities and their potential causes and influences.
- Demonstrate interpersonal and communication skills that result in effective information exchange between patients of all ages and professionals from other disciplines and other specialties.

Person in context of their culture

- Communicate effectively with patients and families from diverse cultural backgrounds.
- Discuss areas where culture can impact the ability of patients to access and utilize health care.

Continuity of Care

Barriers to access

- Describe the barriers to access and utilizing health care that stem from personal barriers.

Examples include:

- Disadvantaged minority populations
- Unemployment
- Lack of education
- Lack of traditional family support
- Inadequate access to transportation
- Personal beliefs on health and wellness
- Language and cultural barriers
- Describe the barriers that patients encounter to accessing and utilizing health care that stem from their particular community. Examples include:
- Low socioeconomic status of communities
- Geographic barriers in rural and remote communities as well as urban intercity
- Inadequate number and quality of health care providers
- Low educational status of communities
- Inadequate availability of social services
- Inadequate access to referral-based health care services, outside of the community
- Increasing ethnic diversity of the population, not matched by the health care workforce
- Describe the barriers stemming from the health care system that affect the ability of patients to obtain and use health care. Examples include:
- High cost of health care
- Increasing number of uninsured and under-insured individuals
- Insufficient capacity of mental health services
- Inadequate number or distribution of primary care providers
- Inadequate coordination of chronic disease care and management across healthcare disciplines

Coordination/Complexity of Care

Team approach

- Describe the value of teamwork in the care of primary care patients.
- Discuss the roles of multiple members of a health care team (eg, pharmacy, nursing, social work, and allied health).
- Participate as an effective member of a clinical care team.

Quality and safety

- Recognize clinical processes established to improve performance of a clinical site. Examples of learning objectives include:
- Describe the use of a quality improvement protocol within a practice and how the protocol might improve health care.
- Describe methods of monitoring compliance with preventive services guidelines.
- Describe how one of the core chronic diseases is monitored in the assigned clerkship site.
- Describe how narcotic use is managed and monitored in the assigned clerkship site.

Health care provided by family physicians has several unique characteristics shown in Table 2. Although many types of physicians provide first-contact care, the characteristics listed below are not always present. Understanding how to provide acute and chronic disease care within this context is of benefit to all medical students.

Table 2

Key Characteristics of Family Physicians

Prior knowledge of the patient
Care for a heterogeneous patient population
Multiple settings with different diagnostic prevalence
Multi-purpose visits
Staged diagnostic approach
Opportunity for follow-up care

Overview of Clinical Care

In addition to the key principles of family medicine, several key messages should be imparted to students as they gain experience working with family physicians. These include the importance of knowing your patient, provision of care within a community versus tertiary care setting, and having the opportunity to provide different types of care within the same visit.

Importance of Prior Knowledge

Having prior knowledge of a patient presenting to the office influences the diagnosis and provides an advantage in negotiating diagnostic testing and treatment strategies. Diagnostic testing can be conducted in stages. First, the physician considers the most common and any dangerous diagnoses. This approach is more cost-effective than obtaining an extensive work-up initially and is appropriate for the outpatient setting where common diagnoses are common. In addition, the opportunity for patients to follow-up allows the family physician to proceed with diagnosis and treatment in a thoughtful, staged manner taking into account the patient's age, gender, or the presence of pregnancy or any chronic illnesses.

Care in the Community Setting

The prevalence of disease varies greatly based on the care setting. These differences in prevalence change pretest probability, affecting the predictive value of a test, and altering posttest probability of a specific diagnosis. For example, a patient presenting to the family physician's office with chest pain will have a much lower likelihood of experiencing a myocardial infarction than a patient presenting with chest pain to the emergency room or subspecialist's office.

The Multipurpose Visit

For family physicians, an acute visit sometimes presents a highly cost-effective opportunity to address chronic medical problems and health promotion. In addition, family physicians frequently care for an entire family, and many issues for the individual patient or family member often surface in the context of a single office visit.

Core Presentations for Acute Care

The suggested topics for core acute presentations are listed in Table 3. Common infectious and non-infectious causes are also listed in addition to any serious conditions that should be considered.

Student Learning Objectives for Acute Presentations

At the end of the clerkship, for each common symptom, students should be able to:

- Differentiate among common etiologies based on the presenting symptom.
- Recognize "don't miss" conditions that may present with a particular symptom.
- Elicit a focused history and perform a focused physical examination.
- Discuss the importance of a cost-effective approach to the diagnostic work-up. (SBP)
- Describe the initial management of common and dangerous diagnoses that present with a particular symptom.

Table 3: Core Acute Presentations With Common Diagnosis, Serious Diagnoses, and Topic-specific Objectives

Topic*	Common	Serious	Topic-specific Objectives	Additional Skills
Upper respiratory symptoms	Infectious (viral upper respiratory infection, bacterial sinusitis, streptococcal pharyngitis, otitis media, and mononucleosis) and noninfectious causes (allergic rhinitis)		• Recognize that most acute upper respiratory symptoms are caused by viruses and are not treated with antibiotics. • Determine a patient's pretest probability for streptococcal pharyngitis and make an appropriate treatment decision (eg, empiric treatment, test, or neither treat nor test). (PBLI)	
Joint pain and injury	Ankle sprains and fractures, knee ligament and meniscal injuries, shoulder dislocations and rotator cuff injuries, hip pain, Carpal Tunnel Syndrome, osteoarthritis, and overuse syndromes (eg, Achilles' tendinitis, patello-femoral pain syndrome, subacromial bursitis/ rotator cuff tendinosis)	Septic arthritis, acute compartment syndrome, acute vascular compromise associated with a fracture or dislocation	• Describe the difference between acute and overuse injuries. • Elicit an accurate mechanism of injury. • Perform an appropriate musculoskeletal examination.† • Apply the Ottawa decision rules to determine when it is appropriate to order ankle radiographs. (PBLI)	Detect a fracture on standard radiographs and accurately describe displacement, orientation, and location (eg, nondisplaced spiral fracture of the distal fibula).
Pregnancy (initial presentation)			• Recognize that many family physicians incorporate prenatal care and deliveries into their practices, and studies support this practice. • Recognize common presentations of pregnancy, including positive home pregnancy test, missed/ late period, and abnormal vaginal bleeding. • Appreciate the wide range of responses that women and their families exhibit upon discovering a pregnancy. (PR)	
Abdominal pain	Gastro-esophageal reflux disease (GERD), gastritis, gastroenteritis, irritable bowel syndrome, dyspepsia, constipation, and depression.	Appendicitis, diverticulitis, cholecystitis, inflammatory bowel disease, ectopic pregnancy, and peptic ulcer disease	• Recognize the need for emergent versus urgent versus non-urgent management for varying etiologies of abdominal pain.	
Common skin lesions	Actinic keratosis, seborrheic keratosis, keratoacanthoma, melanoma, squamous cell carcinoma, basal cell carcinoma, warts, and inclusion cysts		• Describe a skin lesion using appropriate medical terminology.	
Common skin rashes	Atopic dermatitis, contact dermatitis, scabies, seborrheic dermatitis, and urticaria		• Describe the characteristics of the rash. • Prepare a skin scraping and identify fungal elements.	
Abnormal vaginal bleeding			• Elicit an accurate menstrual history. • Recognize when vaginal bleeding is abnormal.	

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Table 3: (Continued)

Topic*	Common	Serious	Topic-specific Objectives	Additional Skills
Low back pain	Muscle strain, altered mechanics including obesity, and nerve root compression	Aneurysm rupture, acute fracture, infection, spinal cord compromise, and metastatic disease	• Describe indications for plain radiographs in patients with back pain. (PBLI)	Conduct an appropriate musculoskeletal examination that includes inspection, palpation, range of motion, and focused neurologic assessment.
Cough	Infectious (pneumonia, bronchitis, or other upper respiratory syndromes, and sinusitis) and non-infectious causes (asthma, GERD, and allergic rhinitis)	Lung cancer, pneumonia, and tuberculosis	• Understand how pretest probability and the likelihood of test results altering treatment can be used to guide diagnostic testing. (PBLI) Recognize pneumonia on a chest X ray.	
Chest pain	Gastrointestinal (eg, GERD), musculoskeletal (eg, costochondritis), cardiac (eg, angina and myocardial infarction), and pulmonary (eg, pulmonary embolism, pneumothorax)		• Describe how age and comorbidities affect the relative frequency of common etiologies. • Apply clinical decision rules that use pretest probability to guide evaluation. (PBLI) • Recognize the indications for emergent versus urgent versus non-urgent management for varying etiologies of chest pain.	Recognize cardiac ischemia and injury on an electrocardiogram (ECG).
Headache	Tension, migraine, and sinus pressure headaches	Meningitis, subarachnoid hemorrhage, and temporal arteritis	• Determine when imaging is indicated.	
Vaginal discharge			• Discuss the interpretation of wet prep and potassium hydroxide (KOH) specimens.	
Dysuria	Urethritis, bacterial cystitis, pyelonephritis, prostatitis, and vulvovaginal candidiasis			Interpret a urinalysis.
Dizziness	Benign positional vertigo (BPV), labyrinthitis, and orthostatic dizziness	Cerebral vascular disease (CVA), brain tumor, and Ménière's Disease		
Shortness of breath/ wheezing	Asthma, chronic obstructive pulmonary disease (COPD), obesity, angina, and congestive heart failure (CHF)	Exacerbations of asthma or COPD, pulmonary embolus, pulmonary edema, pneumothorax, and acute coronary syndrome		Recognize typical radiographic findings of COPD and CHF.
Fever	Viral upper respiratory syndromes, streptococcal pharyngitis, influenza, and otitis media	Meningitis, sepsis, fever in the immunosuppressed patient	• Describe a focused, cost-effective approach to diagnostic testing. (SBP) • Propose prompt follow-up to detect treatable causes of infection that appear after the initial visit. (SBP)	

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Table 3: (Continued)

Topic*	Common	Serious	Topic-specific Objectives	Additional Skills
Depression (initial presentation)			• Appreciate the many presentations of depression in primary care (eg, fatigue, pain, vague symptoms, sleep disturbance, and overt depression). • Use a validated screening tool for depression. (SBP) • Assess suicidal ideation. • Recognize when diagnostic testing is indicated to exclude medical conditions that may mimic depression (eg, hypothyroidism). • Recognize the role of substance use/abuse in depression and the value of identifying and addressing substance use in depressed patients. • Recognize the potential effect of depression on self-care and ability to manage complex comorbidities.	
Male urinary symptoms/ prostate			Select appropriate laboratory tests for a male patient with urinary complaints.	
Dementia			• Perform a screening test for cognitive decline (eg, the clock drawing test or the Mini-Mental Status Examination). • Select appropriate initial diagnostic tests for a patient presenting with memory loss, focusing on tests that identify treatable causes.	
Leg swelling	Venous stasis and medication-related edema	Deep venous thrombosis (DVT), obstructive sleep apnea, and CHF	• Recognize the need for urgent versus nonurgent management for varying etiologies of leg swelling, including when a Doppler ultrasound test for DVT is indicated.	

* Ordered from most to least common based on numbers of ambulatory care visits to primary care offices according to diagnostic groups, United States 2005–2006 (National Health Statistics Reports No.8, August 2008).

† Musculoskeletal examination to include inspection, palpation, range of motion, assessment of commonly injured structures (eg, ligaments of the ankle and knee, rotator cuff in the shoulder), and assessment of neurovascular integrity.

PBLI—problem-based learning and improvement, PR—professionalism, SBP—systems-based practice

Core Presentations for Chronic Diseases

The percentage of patients who have chronic diseases is large and increasing with the aging of the population. Care for patients with chronic diseases requires substantial health care resources. Family physicians provide a large proportion of this care, often coordinating this care among many types of subspecialists. Every student benefits from learning about chronic disease management. Important characteristics of chronic disease management provided by family physicians are shown in Table 4.

Table 4

Key characteristics of Chronic Disease Management by Family Physicians

Chronic disease management knowledge and skill
Attention to co-morbidities
Continuity context
Relationship with the patient
Patient empowerment and self-management support

An introduction to a Chronic Care Model, such as the one developed by Wagner, is appropriate for a third-year medical student. Wagner's model has six fundamental areas: self-management, decision support, delivery system design, clinical information system, organization of health care, and community. In this section, most objectives center around self-management and decision support.

Key Messages for Chronic Disease Care

A similar approach can be applied to most chronic diseases. General components of this approach, appropriate for a third-year medical student, include diagnosis, surveillance, treatment, and shared goal-setting. Chronic disease management involves empowering patients to engage in their own care and working as the leader or member of a team of professionals with complementary skills such as nurses, physical therapists, nutritionists, and counselors.

Many patients have more than one chronic disease. In caring for these patients, continuity increases efficiency and improves patient outcomes. Similar to diagnosis in acute care, continuity allows the family physician to address multiple issues in stages. Students should understand, however, that a follow-up visit with a patient is different than the initial visit with a patient and also different from an acute problem visit.

Students should also learn that a therapeutic physician-patient relationship facilitates negotiation and improves physician and patient satisfaction and outcomes. Relationships with patients are rewarding.

Student Learning Objectives for Chronic Disease Presentations

At the end of the clerkship, for each core chronic disease, students should be able to:

- Find and apply diagnostic criteria.
- Find and apply surveillance strategies.
- Elicit a focused history that includes information about adherence, self-management, and barriers to care.
- Perform a focused physical examination that includes identification of complications.
- Assess improvement or progression of the chronic disease.
- Describe major treatment modalities.
- Propose an evidence-based management plan that includes pharmacologic and non-pharmacologic treatments and appropriate surveillance and tertiary prevention.
- Communicate appropriately with other health professionals (eg, physical therapists, nutritionists, counselors). (PR, SBP)

- Document a chronic care visit.
- Communicate respectfully with patients who do not fully adhere to their treatment plan. (PR)
- Educate a patient about an aspect of his/her disease respectfully, using language that the patient understands. When appropriate, ask the patient to explain any new understanding gained during the discussion. (PR)

Table 5: Core Chronic Disease Presentations With Topic-specific Objectives

Topic*	Topic-specific Objectives
Multiple chronic illnesses (eg, depression, hypertension, hypothyroidism, type 2 diabetes mellitus)	• Assess status of multiple diseases in a single visit. • List important criteria to consider when prioritizing next steps for management of patients with multiple uncontrolled chronic diseases. • Document an encounter with a patient who has multiple chronic diseases using a SOAP note and/or chronic disease flow sheet or template.
Hypertension	• Take an accurate manual blood pressure. • Recognize the signs/symptoms of end-organ disease.
Type 2 diabetes mellitus	• Perform a diabetic foot examination. • Document an encounter using a diabetes mellitus flow sheet or template. (SBP) • Recognize the signs/symptoms associated with hypoglycemia or hyperglycemia.
Asthma/chronic obstructive pulmonary disease (COPD)	• Discuss the differences between asthma and COPD, including pathophysiology, clinical findings, and treatments. • Elicit environmental factors contributing to the disease process. • Recognize an obstructive pattern on pulmonary function tests. • Recognize hyperinflation on a chest radiograph. • Discuss smoking cessation.
Hyperlipidemia	• Determine a patient's cholesterol goals based on current guidelines and the individual's risk factors. • Interpret lipid laboratory measurements.
Anxiety	• Describe how an anxiety disorder can compromise the ability for self care, function in society, and coping effectively with other health problems.
Arthritis	• Guide a patient in setting goals for realistic control of pain and maximized function.
Chronic back pain	• Obtain a medication use history. • Anticipate the risk of narcotic-related adverse outcomes. • Guide a patient in setting goals for pain control and function.
Coronary artery disease	• Identify risk factors for coronary artery disease. • Use an evidence-based tool to calculate a patient's coronary artery disease risk. • Counsel patients on strategies to reduce their cardiovascular risks.
Obesity	• Obtain a dietary history. • Collaborate with a patient to set a specific and appropriate weight loss goal.
Heart failure (HF)	• List underlying causes of HF. • Recognize the signs/symptoms of HF. • Recognize signs of HF on a chest radiograph.
Depression (previously diagnosed)	• Assess suicide risk. • Describe the impact of depression on a patient's ability for self care, function in society, and management of other health problems.
Osteoporosis/osteopenia	• Recommend prevention measures.

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Topic*	Topic-specific Objectives
Substance use, dependence, and abuse	• Obtain an accurate substance use history in a manner that enhances the student-patient relationship. • Differentiate among substance use, misuse, abuse, and dependence. • Discuss the typical presentations for withdrawal from tobacco, alcohol, prescription pain medications, and common street drugs. • Assess a person's stage of change in substance use/abuse cessation. • Communicate respectfully with all patients about their substance abuse. (PR)

* With the exception of multiple illnesses (unknown) and osteoporosis (estimate), these are ordered from most to least common based on numbers of ambulatory care visits to primary care offices according to diagnostic groups, United States 2005–2006 (National Health Statistics Reports No. 8, August 2008).

PR—professionalism, SBP—systems-based practice

Health Promotion and Disease Prevention

Health promotion is an essential component of every person's health care. Family physicians provide health promotion to all patients regardless of life stage or gender. Family physicians provide health promotion in at least three ways—during office visits for health promotion, during office visits for another purpose, and outside of office visits in other health care settings such as extended care facilities and hospitals and partnerships with community agencies or public health officials. Important characteristics of preventive care provided by family physicians are shown in Table 6.

Table 6

Characteristics of Preventive Care by Family Physicians

Evidence-based

Individualized

Opportunistic

Prioritized

Key Messages for Preventive Care

There is an evidence base behind health promotion recommendations, but different organizations have different recommendations. The United States Preventive Services Task Force recommendations are the most appropriate for students to learn in the family medicine clerkship.

Each patient will have a unique combination of primary, secondary, and possibly tertiary prevention recommendations based on his/her risk factors and current diseases. In addition, patient preferences, time constraints, and variability in insurance coverage limit the ability to provide all recommended clinical prevention services for every patient. Creating an individualized health promotion plan requires a preventive medicine knowledge base and skills in negotiation and patient education. Family physicians are skilled in prioritization and must partner with patients to determine which preventive services are appropriate, important, and affordable.

It should be stressed that clinical prevention can be included in every office visit. Learning to "juggle," ie, prioritize or co-manage, acute, chronic, and prevention agendas, is an advanced skill. Student Learning Objectives for Adult Preventive Care Presentations.

- Define wellness as a concept that is more than "not being sick."
- Define primary, secondary, and tertiary prevention.
- Identify risks for specific illnesses that affect screening and treatment strategies. (PBLI)
- For women: elicit a full menstrual, gynecological, and obstetric history.
- For men: Identify issues and risks related to sexual function and prostate health.
- Apply the stages of change model and use motivational interviewing to encourage lifestyle changes to support wellness (weight loss, smoking cessation, safe sexual practices, exercise, activity, nutrition, diet). (PR)
- Provide counseling related to health promotion and disease prevention.
- Discuss an evidence-based, stepwise approach to counseling for tobacco cessation.
- Find and apply the current guidelines for adult immunizations. (PBLI, SBP)
- For each core health promotion condition in Table 7, discuss who should be screened and methods of screening. (PBLI, SBP)
- Develop a health promotion plan for a patient of any age or either gender that addresses the core health promotion conditions listed in Table 7. (PBLI, SBP)

Table 7

Core Health Promotion Conditions for Adults

Breast cancer
Cervical cancer
Colon cancer
Coronary artery disease
Depression
Fall risk in elderly patients
Intimate partner and family violence
Obesity
Osteoporosis
Prostate cancer
Sexually transmitted infection
Substance use/abuse
Type 2 diabetes mellitus

Student Learning Objectives for Well Child and Adolescent Preventive Care Presentations

- Describe the core components of child preventive care—health history, physical examination, immunizations, screening/diagnostic tests, and anticipatory guidance (see Table 8). (PBLI)
- Identify health risks, including accidental and non-accidental injuries and abuse or neglect.
- Conduct a physical examination on a child.
- Identify developmental stages and detect deviations from anticipated growth and developmental levels.
- Recognize normal and abnormal physical findings in the various age groups.

Table 8

Core Health Promotion Conditions for Children/Adolescents

Diet/exercise
Family/social support
Growth and development
Hearing
Lead exposure
Nutritional deficiency
Potential for injury
Sexual activity
Substance use
Tuberculosis
Vision

- Find and apply the current guidelines for immunizations and be able to order them as indicated, including protocols to "catch-up" a patient with incomplete prior immunization. (PBLI, SBP)
- Identify and perform recommended age-appropriate screenings. (PBLI)
- Provide anticipatory guidance based on developmental stage and health risks. (PR)
- Communicate effectively with children, teens, and families. (PR)

The Role of Family Medicine

Family physicians provide the bulk of primary care in the United States. Primary care is undervalued in our health care system and underrepresented in many teaching settings. All students benefit from understanding the value that family physicians bring to a health care system.

Key Messages on the Role of Family Medicine

Health systems based on primary care, compared to those not based on primary care, have better medical outcomes, lower medical costs, improved access, and decreased health disparities.

Discussions about the value of primary care and the provision of primary care by family physicians can be incorporated into acute symptom, chronic illness, or prevention encounters. They can also be discussed separately. Many of these concepts are appropriately introduced in the preclinical curriculum and reinforced during clinical training.

Student Learning Objectives on the Role of Family Medicine

At the end of the family medicine clerkship, students should be able to:

- Compare medical outcomes between countries with and without a primary care base. (SBP)
- Compare the per capita health care expenditures of the United States with other countries. (SBP)
- Discuss the relationship of access to primary care and health disparities. (SBP)