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Curriculum Resources Project Special Topics

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INTRODUCTION TO SPECIAL TOPICS RESOURCES

Incorporated into the contract mandate was that family medicine collaborate with internal medicine and pediatrics on specification of minimum prerequisites of all medical students entering the third-year clerkships across the following areas of special interest to the government for the work of the contract:

- End-of-life and palliative care
- Geriatrics
- Genetics
- Healthy People 2010 objectives
- Informatics
- Substance abuse, including mental health
- Oral Health

Additionally, the contract specified that the resource was to address competencies for these topics across the four-year medical school continuum and to suggest educational strategies and assessment methods. The beauty of this model is that this list of topics was to be included, but not exclusive. Therefore, the model allowed for other topics of importance to be added over time. The events of 9/11 brought out the importance of including a new topic. The FMCR Executive Committee and leader of the Family Medicine Clerkship/Post Clerkship workgroup decided to add the topic of bioterrorism to this list.

The Preclerkship Collaborative Workgroup members from family medicine, internal medicine, and pediatrics derived their specialty-independent prerequisites for the topics

specified in the contract in preparation for the first meeting of that workgroup. This information was then used by "special topic teams," whose members came, in part, from both FMCR Workgroups to ensure that the teams could address competencies across the four-year continuum for all students. Team membership also drew, where possible, upon Advisory Committee members who had been selected in part for their special expertise in one of these areas. These special topic teams then developed competencies within the larger ACGME framework and starred those that they judged to be appropriate for the more clinically advanced levels. This level of guidance was thought to be important to allow institutions flexibility in how and when the basic versus more clinically advanced competencies are taught, depending on the unique institutional environment and context.

For each of these topics, a resource has been developed that will help users understand what the recommended competencies for students to learn are within the ACGME framework for a given topic, how they might spread the teaching of the competencies over a four-year continuum with the advanced, clinical teaching occurring generally during the latter half of that continuum, what educational strategies and assessment methods they might use, and suggested resources.

Currently at the site (<http://fammed.musc.edu/fmc/data/SpecialTopics.htm>), there are html and pdf versions of the following topics:

- Bioterrorism
- End of Life and Palliative Care
- Genetics
- Geriatrics
- Healthy People 2010
- Informatics
- Mental Health
- Oral Health
- Substance Abuse

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Special Topics

Curriculum Resources



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Additionally, the contract specified that the resource was to address competencies for these topics across the four-year medical school continuum and to suggest educational strategies and assessment methods as with the other parts of the resource. The beauty of this model is that this list of topics was to be included, but not exclusive. Therefore, the model allowed for other topics of importance to be added over time. The events of 9/11 brought out the importance of including a new topic. The FMCR Executive Committee and leader of the Family Medicine Clerkship/Post Clerkship workgroup decided post 9/11 to add the topic of bioterrorism to this list.

The Preclerkship Collaborative Workgroup members from family medicine, internal medicine and pediatrics derived their specialty-independent prerequisites for the topics specified in the contract in preparation for the first meeting of that workgroup. This information was then used by "special topic teams," whose members came, in part, from both FMCR Workgroups so as to ensure that the teams could address competencies across the four-year continuum for all students. Team membership also drew, where possible, upon Advisory Committee members who had been selected in part for their special expertise in one of these areas. These special topic teams then developed competencies within the larger ACGME framework and starred those which they judged to be appropriate for the more clinically advanced levels. This level of guidance was thought to be important to allow institutions flexibility in how and when the basic versus more clinically advanced competencies are taught, depending on the unique institutional environment and context.

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Bioterrorism
[html](#) or [pdf](#)

Geriatrics
[html](#) or [pdf](#)

Mental Health
[html](#) or [pdf](#)

End of Life and Palliative Care
[html](#) or [pdf](#)

Healthy People 2010
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Genetics
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Informatics
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Threat of Bioterrorism

Lead Author: Richard Usatine, MD

Clerkship/Post-Clerkship Workgroup members: Ann O'Brien-Gonzales, PhD (Chair), Alexander Chessman, MD (EC Liaison), Caryl Heaton, DO, Janice Nevin, MD, MPH, Lauren Oshman, MD, Deborah McPherson, MD, Mark. E Quirk, EdD, David Schneider, MD, MSPH, William B. Shore, MD, Richard Usatine, MD

OVERVIEW

The derivation of the word *terror* comes from the Greek words *trein*, which means "to be afraid, flee," and *tremein*, which means "to tremble." Terrorism is the systematic, deliberate induction of fear and anxiety into an individual, community, or population. Biological warfare involves the deliberate release of pathogenic organisms or substances into a community. Such deliberate release of pathogenic material for the purpose of provoking community-wide or population-wide fear or anxiety has been termed bioterrorism.

Experts speak of "vulnerability, capability, and intention" as the main components of a successful terrorist event. The intention to cause terror has been called the great asymmetric threat. The vulnerability and weaknesses in our health care system help make us a target for bioterrorism. There is limited "surge capacity" to deal with a large-scale outbreak of any illness requiring emergency care, treatment, or hospitalization.

The reality of recent events dictates that all health care providers, particularly primary care providers, develop competencies in the likely presentations and clinical scenarios resulting from biological warfare agents. At the same time, dealing with the "worried well," and coping with the manifestations of terror and anxiety, will be the most common scenario that occurs in response to bioterrorism threats.

TOPIC LEARNING GOALS AND OBJECTIVES (Organized by ACGME Competencies)

Patient Care

GOAL: Students will assess the impact of terrorism and the threat of bioterrorism on patients, their families, and communities.

OBJECTIVES: Students will be able to:

- Demonstrate skill and sensitivity in discussing the impact of terrorism and the threat of terrorism.
- Communicate to patients about their relative risk of contracting a bioterrorism-

related illness.

GOAL: Students will appropriately treat the manifestations of anxiety disorders, including generalized anxiety disorder, panic attacks, and post-traumatic stress disorder.

OBJECTIVES: Students will be able to:

- Diagnose anxiety disorders, including generalized anxiety disorder, panic attacks, and post-traumatic stress disorder.
- Make appropriate referrals for mental health treatment, including individual counseling and support groups.

Medical Knowledge

GOAL: Students will know the major biological and chemical agents used to create terror, and the presenting signs and symptoms of affected individuals.

OBJECTIVES: Students will be able to:

- List the major biological and chemical agents utilized to create terror.
- Describe current treatment modalities for major biological and chemical agents of terror.
- Assess the real risks in a particular patient exposure.

GOAL: Students will recognize the signs and symptoms of anxiety disorders and post-traumatic stress disorder (PTSD).

OBJECTIVES: Students will be able to:

- Accurately diagnose anxiety disorders, including generalized anxiety disorder, panic attacks and PTSD.
- Recommend current therapy for common anxiety disorders.

Practice-Based Learning and Improvement

GOAL: Students will be able to access accurate information related to the threat of bioterrorism.

OBJECTIVES: Students will be able to:

- Quickly and efficiently locate high-quality information on the Internet related to bioterrorism and associated mental health issues.
- Use critical appraisal skills to assess the validity of resources.

Interpersonal and Communication Skills

GOAL: Students will use effective communication skills in dealing with patient and family concerns about the threat of bioterrorism.

OBJECTIVES: Students will be able to:

- Demonstrate active listening skills and empathy for patients.
- Reassure anxious patients with concerns about bioterrorism-related symptoms.
- Demonstrate the ability to counsel patients about anxiety disorders and provide appropriate treatment.

Professionalism

GOAL: Students will demonstrate ethical decision-making in the use of resources in response to a public health crisis.

OBJECTIVES: Students will be able to:

- Reflect upon personal reactions and concerns to a public health crisis or threat.
- Assess the limits of their own personal knowledge and seek appropriate information sources.

Systems-Based Practice

GOAL: Students will analyze individual, institutional, and public health system responses to large-scale threats to public health.

OBJECTIVES: Students will be able to:

- Explore issues related to distribution of resources for public health needs--assessing risk of biological warfare versus known dangers.
- Investigate the political, economic, and social issues involved in drug recommendations and public health policy.
- Develop plans and strategies, to advocate for policy changes on behalf of patients and communities.

EDUCATIONAL METHODS AND RESOURCES

Clinical Experience

Independent Learning

- American Academy of Family Physicians Web site:
<http://www.aafp.org/btresponse/index.xml>

Small-Group Learning

- Tours or videotapes of local health departments with review of disaster planning and preparation
- Develop and present a plan for a specific bioterrorism attack or natural disaster.
- Partner with your local American Red Cross to provide training for students - Eastern Virginia Medical School, Chris Matson, MD - contact person.

Problem-Based Learning

- Small group with scripted scenarios and role plays

Electives

- Public health department rotation
- Centers for Disease Control

Curricula

- "Influenza-like Infection" Teaching Module UCLA Doctoring 3 Authors: [Richard Usatine](#), Hannah Zackson, & Jerry Hoffman 2/2002.
- CDC TrainingFinder
<http://www.TrainingFinder.org>
- Emergency Preparedness Core Competencies
<http://cpmcnet.columbia.edu/dept/sph/CPHP/resources.html>
- American Academy of Family Physicians Council on Education Residency Curriculum on Bioterrorism, 2002

Published Material

- Galea S, Ahern, J, Resnick H, Kilpatrick H, Bucuvalas M, Gold J, and Vlahov J. Psychological Sequelae of the September 11 Terrorist Attacks in New York City.
- Borio, Frank, et al. Death due to bioterrorism related inhalational nthrax, JAMA. 2001;286:2554-2559.
- Mayer, et al. Clinical presentation of inhalational anthrax following bioterrorism exposure. JAMA. 2001; 286:2549-2553.
- Coico R, Kachur E, Lima V, and Lipper S. Guidelines for Preclerkship Bioterrorism Curricula. Acad Med. 2004; 79:366 ??375.

Lectures

- "Bioterrorism," George Kent, MD, Division of Medicine, Stanford University School of Medicine
- "Preparing Public Health for Emergency Response," Gebbie K, Columbia University School of Nursing:
<http://cpmcnet.columbia.edu/dept/nursing/institute-centers/chphsr/atpm/atpm03.html>
- World Medical Leaders?? Bioterrorism Resource Center Lectures
http://www.wml.com/video_lib/bioterror.jsp

Web Sites

- Columbia University School of Nursing Competencies for health professionals related to bioterrorism.
<http://cpmcnet.columbia.edu/dept/nursing/institute-centers/chphsr/ERMain.html>
- Help With Your Differential Diagnosis Syndromes Associated with CDC "Category A" Critical Biological Agents, University of Alabama Rare Infections & Bioterrorism CE modules.
<http://www-cme.erep.uab.edu/emerginginfections/index.htm>
- CDC Public Health Emergency Preparedness & Response

<http://www.bt.cdc.gov>

- National Library of Medicine-MEDLINEplus Health Topic on Smallpox
<http://www.nlm.nih.gov/medlineplus/smallpox.html>
- ACP/ASIM Bioterrorism Resources
<http://www.acponline.org/bioterro/?chapinc>
- AHRQ Bioterrorism and Emerging Infections
<http://www.bioterrorism.uab.edu/>
- St. Louis University Center for the Study of Bioterrorism
<http://www.slu.edu/colleges/sph/csbei/bioterrorism/index.html>
- Harrison's Online Bioterrorism Module
http://www.accessmedicine.com/amed/public/amed_news/news_article/281.html

Multimedia

- CDC Bioterrorism Update: Smallpox Preparedness. A National Immunization Program and Public Health Training Network (videotape or CD-ROM)
<http://bookstore.phf.org/prod249.htm>
- Communication during crisis: The role of media during public health emergencies
<http://bookstore.phf.org/prod248.htm>
- Logical Images Bioterror Dx with slides
http://www.logicalimages.com/sol_phealth_bioterror.html

ASSESSMENT STRATEGIES

Standardized Patient Cases

- Maria Torres- "Influenza-like Infection & Anthrax," UCLA, [Richard Usatine](#), MD - author
- "Christine Mahan- Smallpox & PTSD" Florida State University, [Richard Usatine](#), MD - author

FACULTY DEVELOPMENT

- AAFP Homestudy CME on Bioterrorism:
<http://www.aafp.org/x13715.xml>
- AAFP Bioterrorism website:
<http://www.aafp.org/btresponse.xml>

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End of Life and Palliative Care

Larrie Greenberg, MD (Preclerkship Collaborative Workgroup); [William B. Shore](#), MD and Deborah McPherson, MD (Family Medicine Clerkship/Post Clerkship Workgroup), and [Ardis Davis](#), MSW (Project Manager). Consultant author Alan Douglass, MD with input from the STFM Group on Pain Management and Palliative Medicine.

OVERVIEW

As the United States population ages and the incidence of chronic disease rises, the need for the delivery of effective palliative care will substantially increase. The Institute of Medicine has proclaimed that physicians and the health care system should be trained to deliver "reliable, skillful and supportive care" to patients with terminal illness, and such skills are essential to any physician. Although core competencies have been established for family medicine residency training in end of life care, there has not until now been an organized approach to teaching end of life and palliative care to medical students.

LEARNING GOALS AND OBJECTIVES (Organized by ACGME Competencies)

Starred (*) objectives are most appropriately addressed during the later stages of medical education such as clinical clerkships.

Patient Care

GOAL: Students will recognize the critical role of end of life and palliative care and its benefits to patients and families, and operate effectively in an experience-appropriate role in the care of such patients.

OBJECTIVES: Students will be able to:

- Describe the principles of caring for patients throughout the dying process.
- Take appropriate symptom, pain, and chronic disease histories.
- Accurately perform the components of the physical examination important in assessing each patient's symptoms.
- * Describe the experience and perspective of the dying patient and his or her family and close friends before and after the patient's death.
- * Obtain an advanced directive from a patient and/or family member recognizing that the foremost consideration is the patient's perspective.
- * Define effective palliative care and pain management from the perspective of a clinical experience.

Medical Knowledge

GOAL: Students will demonstrate core knowledge of pain assessment and management.

OBJECTIVES: Students will be able to:

- Define and explain the pathophysiology of pain.
- Define the basic categories of pain, including somatic, visceral, and neuropathic pain.
- Describe the multi-dimensional aspects of pain and suffering.
- Describe effective pain assessment techniques.
- Describe common medications used to treat pain and their indications, including acetaminophen, NSAIDs, weak and strong opioids, and adjuvant agents.
- Describe common side effects of pain medications and their management.
- Describe effective non-pharmacological approaches to pain control.

GOAL: Students will demonstrate core knowledge of palliative care.

OBJECTIVES: Students will be able to:

- Describe the philosophy and approach of palliative care and hospice.
- Define qualification criteria for the Medicare Hospice Benefit.
- Discuss management of common non-pain symptoms experienced by terminally ill patients including nausea, anorexia, constipation, fatigue, depression, anxiety, delirium, and dyspnea.
- Discuss appropriate use of diagnostic testing in palliative care.
- Discuss the concept of medical futility and the process of withholding or withdrawing treatment.
- Define the various types of advanced directives and how they apply to common clinical care scenarios.
- Describe the process patients go through in their final hours of life and how physicians can maximize patient and family comfort during that process.
- Describe similarities and differences between palliative care for children, adults, and the elderly.

Practice-Based Learning and Improvement

GOAL: Students will demonstrate appropriate self-directed learning and application of evidence to knowledge acquisition.

OBJECTIVES: Students will be able to:

- Choose appropriate text and electronic resources.
- Appropriately utilize those resources in a self-directed manner.
- Recognize the importance of basing knowledge acquisition and clinical decisions on evidence-based resources.

Interpersonal and Communication Skills

GOAL: Students will demonstrate appropriate communication with patients in pain and palliative care patients.

OBJECTIVES: Students will demonstrate:

- Mature, compassionate, and respectful communication.
- Sensitivity to gender, age, race, religious, and cultural issues.

GOAL: Students will recognize psychological issues involved in pain management and palliative care.

OBJECTIVES: Students will be able to:

- Recognize how pain can affect the psyche in patients and how this impacts on management.
- Effectively incorporate psychological issues into patient discussions and care planning.

GOAL: Students will understand patient and family needs and important principles in giving bad news.

OBJECTIVES: Students will be able to:

- Recognize the patient's and family's needs when giving bad news in the context of their cultural and spiritual beliefs.
- Identify and implement the principles of giving bad news in a simulation.

Professionalism

GOAL: Students will recognize their own reactions to end of life issues and how this may impact their approach to patients.

OBJECTIVES: Students will be able to:

- Reflect on their own attitudes, beliefs, and experiences with death, dying and bereavement.
- Defend truth telling when providing bad news to patients and their families.
- Understand that both physicians and patients bring attitudes and emotions, styles, beliefs, and culture to encounters that may have significant impact upon doctor-patient interactions and outcomes.
- Describe major issues surrounding the interaction of spirituality and medicine.
- Demonstrate the ability to investigate the impact of patient's culture, age, gender, and disability on clinical care and medical decisions.

Systems-Based Practice

GOAL: Students will develop awareness of resources that can improve care of patients and families.

OBJECTIVES: Students will be able to:

- Identify the psychosocial resources important to support patients and their families.
- Identify financial and insurance issues involved in selecting the most appropriate resources to assist patients and families.
- Describe the needs of the disabled for health care that is accessible, sensitive,

- competent, and comprehensive.
- Describe the legal foundations of the right of patients to refuse medical care even when self-harm is the likely result.
- Explain the legal requirements and reasoning behind advance directives.
- Identify the role of other health care providers in the care of terminally ill patients.
- Identify the various settings in which terminal care (and death) occurs--e.g., hospitals, ICU, home hospice, nursing home, accidents, and unexpected deaths.

EDUCATIONAL METHODS AND RESOURCES

Teaching Strategies

- Standardized patient interviews to develop communication skills.
- Case-based lectures.
- Reflective group discussion of personal or clinical experiences.
- Specific discussion focusing on sensitive issues including crying, "losing it," and prayer.
- Use of videotapes that focus on end-of-life issues (Wit, The Doctor, Love and Death, Like Rembrandt Draperies, Lorenzo's Oil, Bill Moyers Special, On Our Own Terms www.thirteen.org/onourown/terms).
- Small-group exercises including reviewing taped of interviews with terminally ill patients and families.
- Discussions with hospice patients and families.
- Writing exercises in which students share and reflect on their personal experiences with death.

Integration Strategies

- Incorporate knowledge components of pre-clerkship neurobiology and pathophysiology courses.
- Discuss differences in the approach to end-of-life care on the different clerkships, considering patient age, clinical problems, and other variables.
- Student panel discussions by third- and/or fourth-year students to provide guidance to pre-clerkship students about experiences with death and dying.
- Develop specific mechanisms to ensure that all clinical clerkship students can address their personal issues in a timely fashion when working with terminally ill patients and families both during life and after the patient's death.

Clinical Experience

- Inpatient and outpatient hospice visits
- Home visits
- Hospital visits
- Nursing home visits
- Independent Learning
- CD-ROM self-instructional tools
- Core textbook
- Compilation of relevant articles (either on paper or computer)
- Web-based instructional modules

Published Material for Learners

- Primer of Palliative Care. 3 rd edition. American Academy of Hospice and Palliative Care. 2004. This brief guide synthesizes core material at an appropriate level for medical students.
- UNIPAC book series. 3 rd edition. American Academy of Hospice and Palliative Care. 2003. This series of short monographs concisely covers the breadth of palliative medicine and includes extensive case-based studies that are appropriate for students.
- Kinzbrunner BM, Weinreb NJ, Policzer JS. 20 Common Problems in End-of-Life Care. New York: McGraw-Hill. 2002. This relatively concise text is written at an appropriate level for medical students.
- Schonwetter RS, Hawke W, Knight CF. Hospice and Palliative Medicine: Core Curriculum and Review Syllabus. Dubuque: Kendall/Hunt, 1999. A concise review of core knowledge and skills in palliative care complete with extensive learning objective and references.
- Douglass AB, Maxwell T, Whitecar P . Principles of Palliative Care Medicine Part I: Patient Assessment. Advanced Studies in Medicine 2004; 4(1):15-20. Whitecar P, Maxwell T, Douglass, AB . Principles of Palliative Care Medicine Part 2: Pain and Symptom Management. Advanced Studies in Medicine 2004; 4(2): 88-99. These companion articles provide a concise review of palliative medicine.
- Hospice and Palliative Care: Concepts and Practice, 2 nd ed. by Walter B. Forman (Editor), Denice C. Sheehan, Robert P. Anderson
This book presents a historical overview of hospice and its function as well as symptom management, death education, and ethical issues. Available from:
<http://www.growthhouse.org/books/forman2.htm>

Published Material for Teachers

- American Academy of Family Physicians Core Curriculum Guidelines for End of Life Care <http://www.aafp.org/x16524.xml>
- When Children Die: Improving Palliative and End-of-Life Care for Children and Their Families. Institute of Medicine of the National Academies; 2003. Copies can be obtained from: National Academies Press, 500 Fifth Street, NW, Box 285; Washington DC 20055 (800) 624-6242 or (202) 334-3313 or <http://www.nap.edu>
- American Academy of Pediatrics: Committee on Bioethics Policy Statement of Palliative Care for Children. <http://www.aap.org/policy/re0007.htm>
- Rosenbaum ME, Ferguson KJ, and Lobas J: Teaching medical students and residents skills for delivering bad news: A review of strategies. Acad Med. (2004) 79: 107-117.

Published Material (Miscellaneous)

- Farber SJ et al. Defining effective clinician roles in end-of-life care. J Fam Pract.; 51 (2); February 2002. Article at: <http://www.jfponline.com/content/2002/02/>

jfp_0202_00153.asp

- Farber SJ et al. Issues in end-of-life care. Family practice faculty perceptions. J Fam Pract; 49(7): 525-30; July 1999.
- Torke AM, Quest TE, Kinlaw K, Eley JW, Branch WT Jr. A workshop to teach medical students communication skills and clinical knowledge about end-of-life care. J Gen Intern Med. 2004 May; 19(5 Pt 2): 540-4.

Lectures

- Provide evidence-based didactic sessions on core topics.

Web Sites

- EPERC Web site (Medical College of Wisconsin)
<http://www.eperc.mcw.edu/start.cfm> A central repository for a remarkable set of high quality, peer-reviewed educational resources and information on end of life issues. Many of the materials are at an appropriate level for students.
- The Shaare Zadek Cancer Pain and Palliative Care Reference Database
www.chernydatabase.org This database is an unrivaled gateway to the international medical literature pertaining to all aspects of pain management and palliative care.
- The American Academy of Hospice and Palliative Care www.aahpm.org A source that provides extensive educational resources, including an excellent set of Web links.
- Educating Physicians in End of Life Care <http://epec.net>
An initiative by the American Medical Association that provides excellent educational materials on all aspects on end of life care, including PowerPoint presentations, videos, exercises, and Web-based learning modules.
- Pain Medicine and Palliative Care- Beth Israel Hospital, New York www.stoppain.org Substantial clinical, research, and educational information, including PowerPoint presentations and a resource center.

Other

- STFM [Group on Pain Management and Palliative Care](http://www.stfm.org)

ASSESSMENT STRATEGIES

Standardized Patient Cases

- Giving bad news
- Advance directive discussions
- Pain or other symptom histories
- Educating patients and families

Objective Structured Clinical Examination (OSCE)

- Simulated end-of-life experience
- Simulated evaluation of pain or other symptoms
- Simulated giving bad news

Knowledge Assessment

- Written examination covering core knowledge
- Oral examination evaluating application of core knowledge to clinical situations

Clinical Assessment

- Learners' responses to case-based scenarios
- Learners' self-directed responses to a CD-ROM instructional tool
- Qualitative comments following home/hospice visits
- Responses to trigger tapes developed for specific objectives

Family Medicine Curriculum Resource Project (HRSA Contract No. 240-00-0107)
Preclerkship Collaborative Workgroup and Family Medicine Clerkship/Post Clerkship
Workgroup 2/6/04 Revised

For questions or comments, please contact [Webmaster](#) or [Ardis Davis](#)

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GENETICS

Rick Ricer, MD (Preclerkship Collaborative Workgroup) and [Caryl Heaton](#), DO and [Richard Usatine](#), MD (Family Medicine Clerkship/Post Clerkship Workgroup) and [Ardis Davis](#), MSW (FMCR Project Manager), with input from the STFM Group on Genetic Education.

OVERVIEW

Genetics is important to family physicians because it is a basis for most of the top ten causes of death and for most of the top ten reasons people see a family doctor. Genetics is the basis for primary prevention and counseling. Genetic research makes tremendous strides each year and contributes to continuing practice changes. Family physicians and primary care physicians must keep pace with these advances in research and practice.

Family physicians and other primary care physicians need to be engaged in ongoing developments and discussions concerning screening. Actions for identifying genetic risk can be thought of in at least two perspectives. One is reactive: as a diagnostic tool for understanding a patient symptom, sign, or lab value. The other is proactive: as a screening test for genetic risk for adult-onset common disease in asymptomatic patients. Increasingly, more attention is being paid to the family history as a critical preventive tool.

TOPIC LEARNING GOALS AND OBJECTIVES (Organized by ACGME Competencies)

The starred (*) objectives are ones that are most appropriately addressed during the later stages of medical education (i.e., more suitable for more experienced students and clinical rotations.)

Patient Care

GOAL: Students will identify and counsel patients at risk for common genetic disorders.

OBJECTIVES: Students will be able to:

- Perform a genogram (graphic family history/pedigree) and evaluate family history information to identify patients for increased risk of genetic disorders.
- Perform a genogram and evaluate family history information to identify women with an increased risk of breast and/or ovarian cancer.
- * Discuss how to provide pretest counseling for a genetic test (for example BRCA 1 and 2.)
- * Do a FOCUSED family history when indicated and decide when that is not indicated. The family history does not, for example, give helpful information about hemochromatosis. If a patient has elevated liver enzymes and negative hepatitis studies, however, a FOCUSED family history is very important.
- Recognize the interface of genetics and environmental/behavioral factors. For example,

if a patient has inherited the gene (or genes) for syndrome X (metabolic syndrome, insulin resistance syndrome), he or she may never show the syndrome unless he or she becomes overweight. Another patient without the genetic predisposition can become overweight and never show the syndrome.

Medical Knowledge

GOAL: Students will have basic biomedical, epidemiological and social-behavioral knowledge of genetics and be able to apply this knowledge to patient care.

OBJECTIVES: Students will be able to:

- Describe important features of autosomal dominant, recessive, and sex-linked modes of inheritance.
- Describe the genetic risks of different types of cancer.
- Recognize the potential for inheritance of risk of different types of cancer through the paternal side.
- Evaluate management strategies for women with a high risk of cancer.
- Describe the family history characteristics associated with increased cancer risk and with inherited colorectal cancer syndromes.
- Describe the rationale for early and more aggressive cancer and heart disease screening in people with a positive family history.
- Describe the use of serum iron measures in screening/diagnosis of iron overload disease.
- Recognize iron overload disease as a common genetic condition.
- Discuss polygenetic disease, multifactorial diseases (asthma, allergies, syndrome X), and the concept of variable penetrance as it applies to clinical practice.

Practice-Based Learning and Improvement

GOAL: Students will be able to find and use electronic resources for basic information and risk assessment in the diagnosis and management of genetic disorders.

OBJECTIVES: Students will be able to:

- * Use current breast cancer risk assessment models and describe their limitations.
- Locate reliable sources of Web-based information on breast cancer genetics and other genetic syndromes.

Interpersonal and Communication Skills

GOAL: Students will apply effective interpersonal and communication skills to the care of patients that have or are at risk for genetic disorders.

OBJECTIVES: Students will be able to:

- * Demonstrate effective patient-centered interviewing to obtain a history of ethnicity or personal genetic risk factors.
- * Demonstrate a sensitive approach to discussing the issues surrounding the decision to get genetic testing.

Professionalism

GOAL: Students will apply ethical principles to the issues of genetic testing and working with genetic information.

OBJECTIVES: Students will be able to:

- Discuss the ethical and social implications of genetic testing.
- Describe the implications for patient confidentiality when family members receive care at the same health care facility.
- Describe the rationale for the claim that health care providers may have a duty to disclose information about genetic risk to family members.
- Discuss the counseling and confidentiality issues that arise in family-based detection of people with hereditary hemochromatosis.

Systems-Based Practice

GOAL: Recognize the interdisciplinary nature of care for patients with genetic disorders.

OBJECTIVES: Students will be able to:

- Analyze and value the role of the family physician as part of a comprehensive team that provides care for patients and families with genetic disorders or genetic risk.

EDUCATIONAL METHODS AND RESOURCES

Curricula

- Genetics in Primary Care (GPC) Curriculum September 2001 Revision
http://genes-r-us.uthscsa.edu/resources/genetics/primary_care.htm
 The materials available at this site are designed to serve as a bridge between genetics and primary care. The modules provide a series of teaching cases, developed to be representative of patients seen in primary care, while also allowing for the demonstration of genetics issues and principles. Modules are on the following topics:
 - Breast and Ovarian Cancer
 - Cardiovascular Disease
 - Colorectal Cancer
 - Congenital Hearing Loss
 - Dementia
 - Developmental Delay
 - Iron Overload
 - Ethical, Legal, and Social Implications (ELSI)

Each module is aimed at teaching residents in primary care and begins with a set of key points and then learning objectives. Each module contains cases that can be used for teaching in residency training but also would be appropriate for clinical teaching of medical students. Each module contains Web sites for additional background information and articles from the medical literature, including relevant consensus and policy statements where applicable.

To access the materials

[Click on the site](#) .

If you want to see the full Table of Contents click on that and you can see everything that is available. But if you want to click on one of the teaching module topics, just select one of the above module topics.

Web Sites

- SEE ABOVE GPC Curriculum Web site information:

http://genes-r-us.uthscsa.edu/resources/genetics/primary_care.htm

- Genetics in Clinical Practice: A Team Approach

This program, based on the "Virtual Practicum" model, is intended for health care providers who may see patients with disorders - or who have concerns about disorders - in which knowledge of clinical genetics can positively affect outcomes. It may also be helpful in the training of students in these professions, genetic counselors, medical laboratory professionals, public health professionals, and others who may have an interest in genetic testing.

This program takes place in a "Virtual Genetics Clinic," where the learner can participate in a "Virtual Mini-Fellowship" with a master clinician/master teacher (Dr. Ed McCabe). The program's flow and content center on four simulated patients who have, or are at risk of developing, diseases in which knowledge of clinical genetics can affect outcomes. In some instances, patient outcomes will depend on the management decisions and other actions of the learner. Users are able to visit the Learning Resources Room, in which they can attend lectures, listen to interviews, and search the World Wide Web for relevant information. They can also visit a "CLIA-certified" laboratory to see how genetic tests are done and interpreted.

<http://iml.dartmouth.edu/education/cme/Genetics/index.html>

- Web site on cancer genetics for health care professionals that includes information for patients: <http://www2.umdj.edu/cigenweb/index.html>
- "Genes at work" contains multilingual materials and lab resources: www.umdj.edu/genesatwork
- Web Site on Iron Overload: <http://www.ironoverload.org/>.

Other

- Standardized patient case for small-group learning written by [Richard Usatine](#), MD, and colleagues at UCLA for Doctoring at UCLA and FSU. It is a two- to three-part case that includes SP scripts and a videotape of a real patient dying of breast cancer discussing end of life issues. The updated faculty tutor guide has information on how to deal with patients that are at significant risk for being BRCA1 or 2 positive. Email [Richard Usatine, MD](#) for further information.
- Genetic Research and Health Disparities. JAMA. June 23/30, 2004: Vol. 291:24; pp. 2985-89.

For questions or comments, please contact [Webmaster](#) or [Ardis Davis](#)

This page last updated October 22, 2004

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Care of Older Adults

Thomas Defer, MD (Preclerkship Collaborative Workgroup), Janice Nevin, MD and Alexander Chessman, MD (Family Medicine Clerkship/Post Clerkship Workgroup), and [Ardis Davis](#), MSW (FMCR Project Manager) with input from the STFM Group on Geriatric Education.

Contributing Author and Consultant: Harry Strothers, MD

OVERVIEW

It is estimated that by the year 2030, the proportion of U.S. citizens 65 years old and older will be greater than 20%. Indeed, the most rapid rate of growth is among the very oldest group - those over age 85. Not only are people living longer, but also the elderly population is becoming increasingly diverse. In addition, the prevalence of individuals living with chronic diseases that have the potential to affect function and quality of life is also on the rise. These changing demographics will have a significant impact on the practice of medicine and make it imperative that gerontology and geriatric medicine be addressed in medical education.

Medical school curricula must help students understand how to manage geriatric populations with an emphasis on health promotion, disease prevention, and optimizing functional ability. Students must understand the normal changes related to aging, the impact of changing physiology on pharmacologic interventions, the effect of chronic disease on daily living, and the range of community services that are available to support the aging patient. They must also be well versed in the preventive health care needs of the large majority of well elderly.

LEARNING GOALS & OBJECTIVES (Organized by ACGME competencies)

The starred (*) objectives are ones that are most appropriately addressed during the latter stages of medical education (i.e., more suitable for more experienced students and clinical rotations.)

Patient Care

GOAL: Students will demonstrate care that is compassionate, age appropriate, and effective for the treatment of health problems and the promotion of health in the elderly.

OBJECTIVES: The student will:

- * Perform the components of a comprehensive geriatric assessment (history and physical examination), including mobility and gait and balance assessments, mini-mental status examination, and pre-operative assessment. (Beginning students should be able to do history, including mini-mental status examination.)
- * Discuss preventive services with patients, taking into consideration national

- guidelines, the patient's goals and plans, and the patient's medical condition.
- * Identify and work effectively with the older patient's caregivers, including demonstrating compassion for the challenges they face in their day-to-day care of the frail elderly.
 - * Provide palliative care, pain management, and end-of-life care in the context of family and individual values.
 - * Manage patients in transition between settings, e.g., between ambulatory/hospital settings and long-term care, including the nursing home/home care.
 - * Take a sexual history from an elderly patient and be able to assess sexual health (beginning students should be able to do the history part).

Medical Knowledge

GOAL: Students will demonstrate the application of evidence-based knowledge about established and evolving bio-medical clinical and cognate (epidemiology and socio-behavioral) sciences in the care of the elderly patient.

OBJECTIVES: Students will:

- Explain the normal physiologic, psychological, social, and environmental changes of aging, including theories of aging such as biochemical/molecular, cellular, genetic, and bio-psychosocial, and recognize the pathology associated with normal aging and age-associated processes.
- Describe a typical, healthy, active, and productive elderly person.
- Explain the pharmacological issues (including issues regarding poly-pharmacy) in aging and describe relevance to therapeutic decisions, including demonstrating adjustment of dosing based on the knowledge of changes in pharmacokinetics that occur as a normal process of aging.
- * Demonstrate a commitment to maintaining and improving the older patients' functional abilities and independence, including recognition of the under-reporting of symptoms and illnesses (sexuality, substance abuse, elder abuse and neglect, and home safety).
- Explain other issues related to the psychosocial health of elderly patients, including under reporting of symptoms and illnesses (sexuality and substance abuse).
- * Detail syndromes associated with aging: dementia/delirium, depression, incontinence, falls/mobility/balance, immobility, pressure ulcers, sensory impairment (including visual and hearing impairment, elder abuse, polypharmacy, malnutrition, sleep disorders, and nonspecific presentations of disease).
- * Describe diseases that occur more commonly in the older adult such as heart disease, osteoarthritis, and forms of cancer.

Practice-Based Learning and Improvement

GOAL: Students will be able to evaluate practice-based systems of patient care using available evidence to improve the health of elderly patients

OBJECTIVES: The student will:

- * Develop age-appropriate preventive care strategies in the elderly at all levels (primary - exercise, nutrition; secondary - age-appropriate screening; tertiary - post MI rehab and chemoprophylaxis).

- Develop systems to manage care that is delivered to an elderly patient across a variety of settings such as office, hospital, home, sub-acute rehabilitation, and nursing home.
- * Demonstrate an approach to reducing the tendency of elderly to experience iatrogenic illness (e.g., adverse effects of medications, institutionalization, and diagnostic tests).

Interpersonal communication skills

GOAL: Students will demonstrate interpersonal and communication skills with elderly patients, their families and caregivers, and other health professionals that result in the exchange of information to care effectively for elderly patients.

OBJECTIVES: The student will:

- * Demonstrate interpersonal and communication skills that result in effective information exchange between older patients, their families, and professionals from other disciplines and other specialties.
- Demonstrate sensitivity and responsiveness to an individual patient's culture, age, gender, and disabilities.

Professionalism

GOAL: Students will demonstrate a commitment to carrying out the professional responsibilities, adherence to ethical principles, and sensitivity required to provide culturally effective care to the elderly.

OBJECTIVES: The student will:

- Describe the various myths and stereotypes related to older people, recognizing their impact can adversely affect optimal care of elderly patients and be aware of their own attitudes about aging, disability, and death.
- * Demonstrate application of ethical principles pertaining to the provision of withholding clinical care for the elderly.
- * Demonstrate awareness of the cultural aspects of aging, including being familiar with the influence of culture and ethnicity on the aging process, health and disease perception, and medical care.

Systems-Based Practice

GOAL: Students will demonstrate both an awareness of the larger context and systems of care that affect elderly patients and an ability to effectively call on system and community resources to provide care that is of optimal value.

OBJECTIVE: The student will:

- Describe the demography and epidemiology of aging, including the growth in numbers of elder people and heterogeneity of the older population.
- Describe financial aspects of health care of the elderly, including Medicare, Medicaid, managed care, and regulations governing practice in the home and nursing home.
- Demonstrate application to patient care of the community resources available for the elderly (including those used to prevent institutionalization).

- * List community resources generally available for elderly patients (at the clinical level, this list might be reflective of the community within which their care is located).

EDUCATIONAL METHODS and RESOURCES

Teaching strategies:

Lecture/Workshop:

- Attend multidisciplinary geriatrics rounds in hospital, nursing home
- Geriatrics elective
- Home visits with Home Health Agencies and/or faculty member
- Standardized geriatric patient (patient presents to geriatric assessment center)
- Direct patient care - office, hospital, nursing home, etc - with preceptor

Integration strategies:

- NOTE: AAMC/Hartford Foundation Grant Award Recipients - at this Web site: <http://www.aamc.org/meded/hartford/foundation.htm> These Geriatrics Curriculum Grants Initiative programs funded by the AAMC/Hartford Foundation may have suggestions about integration.

Clinical Experience:

- Office Practice
- Acute Care Hospital (e.g. Multidisciplinary Geriatric Rounds)
- Geriatric Assessment Center
- Nursing Home
- Sub-Acute Rehabilitation Unit
- Home Visit with Home Health Agencies and/or with faculty member

Electives:

- AAFP has a catalogue of elective rotations around the country. This may have listed opportunities for students in geriatrics rotations.

Other:

EDUCATIONAL RESOURCES

Search Strategy: combining the terms [*Education, Medical, Undergraduate](#) / & [* Geriatrics](#) returned the most specific references. Other MeSH terms include Academic **Medical** Centers. Aged. * **Education** , **Medical** / td [Trends]. * **Elder** Abuse. / ed [**Education**]. Human. Internship and Residency. * **Models** , **Education** al

Aimed at students:

- <http://family.georgetown.edu/geriatrics/syllabus/> Lecture Notes in Geriatrics by Henry Wieman, MD

- <http://app1.unmc.edu/intmed/geriatrics/index.cfm?webtype=graphics&CONREF=44>
The Pearl cards are a short concise review of a particular geriatric topic. Developed by Dr. Edward Vandenberg, Dr. Jane Potter of the Geriatrics section at the University of Nebraska for their geriatric medicine sub-internship.
- http://app1.unmc.edu/intmed/geriatrics/index.cfm?webtype=graphics&L2_ID=29&CONREF=21&L1_ID=9 The University of Nebraska Geriatric education resources.
- http://www.merck.com/mrkshared/mm_geriatrics/home.jsp The Merck Manual of Geriatrics On-line version.
- <http://members.aol.com/TGoldberg/prevrecs.htm> PREVENTIVE MEDICINE AND SCREENING IN OLDER ADULTS: SUMMARY OF RECOMMENDATIONS by [Todd H. Goldberg, M.D.](#) Albert Einstein Medical Center, [Division of Geriatric Medicine](#), Philadelphia, PA.
- <http://www.geriatricsatyourfingertips.org/> The on-line version of the AGS pocket sized book. A PDA version is available (free as of 9/04) for those who register on the Web site.
- <http://dir.yahoo.com/Health/Medicine/Geriatrics/> a listing of Web sites

Curricular resources:

- As of June 2001, the Association of American Medical Colleges (AAMC), in collaboration with the John A. Hartford Foundation in New York City, had awarded 40 grants to U.S. medical schools to enhance the gerontology and geriatric curricula. For more information, visit:
<http://www.aamc.org/meded/start.htm>
Click on [The AAMC-Hartford Geriatrics Curriculum Program](#)
- Sealy Center on Aging University of Texas Medical Branch Galveston, TX <http://aging.utmb.edu/education/scoa> UTMB has a variety of curricular materials from their Sealy Center on Aging.
- GERIATRICS RESOURCES from the Society of General Internal Medicine (SGIM) <http://www.sгим.org/GeriatricsTeachingResources.cfm> SGIM's Geriatrics Teaching Resources provide Web sites and organizations useful for teaching clinical geriatrics. The site was developed by Beth O'Toole, Marilyn Schapira, and Brent Williams, with support from the SGIM-Hartford Collaborative Centers in General Medicine and Geriatrics Project. Now available on SGIM's Web site is the Annotated Bibliography to the SGIM/Hartford Paper, "Integrating Geriatrics into Internal Medicine Residency Programs" (published in an supplement to Annals of Internal Medicine). Categorized in topics including Conceptual Papers, Geriatrics in IM Training, Curricula, Residents' "Baseline" knowledge, Prepared by David Thomas, Eileen Callahan, et al.
- The American Geriatric Society (AGS) (<http://www.americangeriatrics.org/>) has multiple resources including; Geriatrics at Your Fingertips in both paper and PDA formats, Geriatric Review Syllabus 5 (GRS5) Teaching Slides, Volume I (1 hour PowerPoint presentations on Assessment of the Older Adult, Hearing Impairment, Delirium, Nutrition, Malnutrition, and Feeding Issues, Dementia, Osteoporosis, Depression and Other Mood Disorders, Palliative Care, Dermatologic Diseases and Disorders, Pharmacotherapy, Diseases and Disorders of the Foot, Preventive Care, Dizziness and Syncope, Pressure Ulcers, Gait Disturbances and Falls, Sexual Function and Dysfunction, Geriatric Health Care: Principles and Statistics, Visual Impairment, Gynecology, Urinary Incontinence were available (\$39 for a two year subscription <http://www.frycomm.com/ags/teachingslides/>) as of 9/04.

- John A. Hartford Foundation consortium for Geriatrics in Residency Training distributed by Stanford University Geriatric Education Resource Center <http://sugerc.stanford.edu/index0a.html>

Published material for Clerkship and Course Directors/Developers

- Heath JM, Dyer CB, Kerzner LJ, Mosqueda L, Murphy C. Four models of medical education about elder mistreatment. *Acad Med.* 77(11):1101-6, 2002 Nov. The authors describe four models of incorporating elder-mistreatment curricular content and collaboration with adult protective service (APS) community service agencies into geriatrics medical education.
- Karani R, Callahan EH, Thomas DC. An unfolding case with a linked OSCE: a curriculum in inpatient geriatric medicine. *Acad Med.* 77(9): 938, 2002 Sep.: This study sought to design, implement, and evaluate a unique educational curriculum in inpatient geriatrics for internal medicine housestaff.
- Supiano MA, Fantone JC, Grum C. A Web-based geriatrics portfolio to document medical students' learning outcomes. *Acad Med.* 77(9): 937-8, 2002 Sep.: The University of Michigan Medical School is integrating into its curriculum the attitudes, knowledge, and skills that pertain to the care of older individuals using a defined set of core learning outcomes encompassing all four years. Students demonstrate proficiency in these outcomes as a graduation requirement. The school developed an individualized, interactive, Web-based geriatrics portfolio to track the acquisition and mastery of these outcomes for students.
- Thornhill J, Richeson N, Roberts E. Senior mentor program: a geriatrics focused curriculum. *Acad Med.* 77(9): 934-5, 2002 Sep. Introducing medical students to a healthy elderly population and presenting the health care challenges in this population. This program provides a longitudinal experience for undergraduate students with local elders and will provide multiple opportunities for students to follow their same senior mentors over a four-year period both in the home and in the clinical setting. In partnership with the division of geriatrics, healthy patients over 65 were recruited to serve as senior mentors.
- Arnold L, Shue CK, Jones D. Implementation of geriatric education into the first and second years of a baccalaureate-MD degree program. *Acad Med.* 77(9): 933-4, 2002 Sep.: The UM-KC School of Medicine seeks to help first and second students view aging as a multidimensional process, challenge stereotypes about aging, learn about factors in healthy aging, and explore medical conditions of older patients by pairing them with a mentor on aging. The mentor is an older adult living independently and experiencing normal psychosocial issues of aging without major medical problems.
- Cleary LM, Lesky L, Schultz HJ, Smith L. Geriatrics in internal medicine clerkships and residencies: current status and opportunities. *Am J Med.* 111(9): 738-41, 2001 Dec 15.
- Marcdante KW, Simpson D, Duthie E. Threading geriatrics content through a four-year curriculum. *Acad Med.* 76(5): 526-7, 2001 May. A key feature of weaving such a curriculum is to provide materials that support, not replace, key concepts in existing course and clerkships.
- Anonymous. Core competencies for the care of older patients: recommendations of the American Geriatrics Society. The Education Committee Writing Group of the American Geriatrics Society. *Academic Medicine.* 75(3): 252-5, 2000 Mar. The aging of the U.S. population has led many organizations to call for an increase in the amount of clinical geriatrics training in medical education. A subcommittee of the American Geriatrics Society's Education Committee was assigned the task of defining core competencies for geriatrics education in medical schools. The subcommittee reviewed

- the available literature, surveyed selected programs in geriatrics education, and sought input from experts in geriatrics education. They then defined the core knowledge, attitudes, and skills students must develop to care for older people. This article summarizes these core competencies, which medical educators may find useful in developing new curricula on aging or in evaluating existing curricula.
- Summer AM, Donahue JB, Kaplan K. Introducing home visits and interdisciplinary learning to an existing geriatrics practicum for medical students. *Acad Med.* 74(5): 602, 1999 May.
 - Westmoreland GR, Litzelman DK. A geriatric medicine program in the internal medicine clerkship. *Acad Med.* 74(5): 592-3, 1999 May.
 - Stiles N, Haist S. A four-year longitudinal gerontology curriculum for medical students. *Acad Med.* 74(5): 584-5, 1999 May.
 - Huber P, Gold G, Michel JP. Innovation in an undergraduate geriatrics program. *Acad Med.* 73(5): 579-80, 1998 May.
 - Hall NK, Riesenber LA, Stein LK, Biddle WB. Longitudinal effectiveness of a medical school geriatrics clerkship. *Acad Med.* 72(10 Suppl 1): S28-30, 1997 Oct.
 - Wener S, Foley C, Jaffe A. Three years of a required geriatrics module for third-year medical students. *Acad Med.* 66(5): 292-4, 1991 May. The Parker Jewish Geriatric Institute, a teaching nursing home at which an accredited internal medicine geriatrics fellowship is based, co-developed with the Department of Family Practice of the medical school at the State University of New York at Stony Brook a mandatory geriatrics module for third-year medical students. The module's implementation over a three-year period (1985-1987) with 278 medical students is described.
 - Wieland D, Rubenstein LZ, Ouslander JG, Martin SE. Organizing an academic nursing home. Impacts on institutionalized elderly. *JAMA.* 255(19): 2622-7, 1986 May 16. In March 1984, a program for an academic nursing home was established at the Sepulveda Veterans Administration Medical Center. The program was designed to improve care of nursing home patients, provide interdisciplinary training for medical house staff and allied health students, and stimulate research. Overall, the costs of nursing home care were only minimally increased by the program. Results suggest that programs like the academic nursing home can lead to improved process and outcomes of nursing home care.
 - Powers JS, Burger C, Manian FA, Kuhn K, Lichtenstein MJ, Billings FT. A teaching nursing home: the Vanderbilt experience. *South Med. J.* 79(3): 267-71, 1986 Mar. A program to provide exposure to geriatrics as a teaching nursing home project was initiated at a large urban university medical center. Positive experiences, changes of attitude, and personal growth were noted among those involved in teaching, learning, and care of patients. A description of the program, its expansion, and plans for the future are detailed.
 - Woolliscroft JO, Calhoun JG, Maxim BR, Wolf FM. Medical education in facilities for the elderly. Impact on medical students, facility staff, and residents. *JAMA.* 252(24): 3382-5, 1984 Dec 28. The development of positive attitudes toward elderly patients has been identified as being an important factor in providing quality geriatric care. This study shows that students' attitudes toward the elderly can be positively changed through incorporation of training at appropriate community facilities for the elderly into existing curricula.
 - Powers CS, Savidge MA, Allen RM, Cooper-Witt CM. Implementing a mandatory geriatrics clerkship. *J Am Geriatr Soc.* 50(2): 369-73, 2002 Feb. This paper reports the experience of creating a 4-week, mandatory geriatrics clerkship for junior medical students at the University of Arkansas for Medical Sciences Hospital, the Central Arkansas Veterans Healthcare System Hospital, community nursing homes, and community hospice programs in Little Rock, Arkansas. This paper demonstrates that students acquired sufficient cognitive knowledge to complete satisfactorily the

clerkship but did not highly value the experience.

- Alford CL, Miles T, Palmer R, Espino D. An introduction to geriatrics for first-year medical students. *J Am Geriatr Soc.* 49(6): 782-7, 2001 Jun. This study was to determine the impact of a new educational program. Attitudinal assessments were administered to the group before and after participation in the program and to a comparison group of nonintervention students at the University of Texas Health Science Center, San Antonio. The impact of the program was mixed. Although awareness of geriatrics and comfort with older people was increased, there was little change in career aspirations. Students in the program increased their awareness of physical decline in old age, setting the stage for teaching them about the physician's role with regard to function, and learned that geriatrics is a low-status specialty.
- Education in geriatric medicine. AGS Education Committee and Public Policy Advisory Group (PPAG). *J Am Geriatr Soc.* 49(2): 223-4, 2001 Feb. Positions: 1. Gerontology and geriatric medicine should be integrated into the curriculum for each year of medical school, and clinical experiences in geriatrics should be required. 2. Residency and fellowship training programs that involve primary or consultative care of elderly patients should be required to have scheduled clinical and didactic experience in geriatrics. The full spectrum of health care settings should be utilized for training. 3. Future faculty responsible for geriatric education within family medicine, internal medicine, and psychiatry should have academic geriatric fellowship training that includes instruction in clinical care, teaching, research, and administration. Faculty in other specialties who are responsible for geriatric education should have specific advanced training in gerontology and geriatric medicine, especially as it relates to their discipline. 4. Formal recognition of expertise in geriatric medicine should be considered by all specialties that provide care to older adults. 5. Practicing physicians who provide substantial care to older adults should be strongly encouraged to gain continuing medical education in geriatrics. All sectors of the health care market place, including both the for-profit and not-for-profit arenas should be penetrated. 6. Continued increased funding is needed for the support of medical student, residency, and fellowship training programs in geriatric medicine. This must be available for training in acute inpatient, outpatient, and long-term care settings. Additional funding is necessary to support the development of geriatrics faculty and a sufficient number of faculty to direct clinical research and educational programs.
- Landefeld CS, Callahan CM, Woolard N. 2003 Supplement to *Annals of Internal Medicine* General Internal Medicine and Geriatrics: Building a Foundation To Improve the Training of General Internists in the Care of Older Adults. *Ann Intern Med.* 2003; 139 609-614
<http://www.annals.org/cgi/content/abstract/139/7/609?etoc>
- Rubin CD, Stieglitz H, Vicoso B, Kirk L. Development of geriatrics-oriented faculty in general internal medicine. *Ann Intern Med.* 2003;139 615-620
<http://www.annals.org/cgi/content/abstract/139/7/615?etoc>
- Simon SR, Fabiny AR, Kotch J. Geriatrics training in general internal medicine fellowship programs: current practice, barriers, and strategies for improvement. *Ann Intern Med.* 2003;139 621-627
<http://www.annals.org/cgi/content/abstract/139/7/621?etoc>
- Thomas DC, Leipzig RM, Smith LG, Dunn K, Sullivan G, Callahan, E. Improving geriatrics training in internal medicine residency programs: best practices and sustainable solutions. *Ann Intern Med.* 2003;139 628-634 <http://www.annals.org/cgi/content/abstract/139/7/628?etoc>

Websites:

- American Federation for Aging Research (AFAR) - <http://www.afar.org> 1414 Sixth Avenue, 18th Floor New York, NY 100 19 (212) 752-2327 The Federation's main objective is to support basic and clinical biomedical research in the field of aging. AFAR grants are awarded to investigators based on competitive proposals. There are also funds available for student research projects.
- American Medical Student Association (AMSA) - <http://www.amsa.org> 1902 Association Drive Reston, VA 20191 (703) 620-6600 AMSA is made up of 30,000 students with local chapters in 140 allopathic and osteopathic schools throughout the country. It is dedicated to the improvement of medical education, health care, and health care delivery. Areas of interest are organized into action committees and interest groups on critical health issues. The Geriatrics Interest Group maintains a Web page on AMSA's Web site with information for students, including interviews with physicians specializing in geriatric care and student chapter project ideas. The interest group also coordinates a listserv that acts as a forum among medical students to exchange ideas and concerns regarding geriatric medicine and to share information relevant to geriatric practice.
- Association for Gerontology in Higher Education (AGHE) - <http://www.aghe.org> 1001 Connecticut Avenue, NW, Suite 410 Washington, DC 20036 202/429-9277 AGHE serves as an advocate for gerontology in higher education. Membership comprises over 300 institutions of higher education throughout the United States and Canada. The Association has various publications, including a newsletter and a National Directory of Educational Programs in Gerontology
- American Society on Aging (ASA) - <http://www.asaging.org> 833 Market Street, Suite 516 San Francisco, CA 94103 (415) 543-2617 ASA sponsors a wide array of educational activities across the country. Its constituency is largely composed of caregivers from a number of professional disciplines, including nursing, social work, medicine, psychology, and gerontology. Special activities for students are sponsored.
- Gerontological Society of America (GSA) - <http://www.geron.org> 1411 K Street, NW, Suite 300 Washington, DC 20005 (202) 393-1411 Also one of the largest professional associations in the United States, the GSA has major interest sections for Biological Sciences, Social Research, Planning and Practice, Clinical Medicine, and Behavioral and Social Science. GSA conducts a large annual meeting and supports a number of student activities.
- The National Council on the Aging, Inc (NCOA) - <http://www.ncoa.org> 600 Maryland Avenue, SW West Wing 100 Washington, DC 20024 (202) 479-1200 The Council sponsors a Geriatric Fellowship for Medical Students (GFMS) program. Fellowships are granted to undergraduates who submit successful proposals to carry out specific projects.
- The American Geriatric Society (AGS) (<http://www.americangeriatrics.org/>) with over 6,500 physicians and other health care professional members, the AGS has multiple resources including; Geriatrics at Your Fingertips in both paper and PDA formats, GRS5 Teaching Slides, Volume I.
- <http://sugerc.stanford.edu/index0.html> Stanford University Geriatric Education Resource Center (SUGERC) The John A. Hartford Foundation Consortium for Geriatrics in Residency Training
- <http://family.georgetown.edu/geriatrics/syllabus/> Lecture Notes in Geriatrics by Henry Wieman, MD
- <http://www.eperc.mcw.edu/> End of Life/Palliative Care Education Resource Center
- <http://www.pogoe.org/px/> Portal of Online Geriatric Education (POGOe) is an online clearinghouse that provides those interested in geriatrics education with a single source for high-quality educational materials primarily designed for physicians in training and

practicing physicians.

Family Medicine Curriculum Resource Project (HRSA Contract No. 240-00-0107)
Preclerkship Collaborative Workgroup and Family Medicine Clerkship Post Clerkship
Workgroup GERIATRICS Special Topic Outline. If you have comments/input about this
material, please contact Ardis Davis, Project Manager at ardisd7283@aol.com
September 24, 2004 Revision.

For questions or comments, please contact [Webmaster](#) or [Ardis Davis](#)

This page last updated October 22, 2004

Special Topics

Curriculum Resources



HEALTHY PEOPLE 2010 (HP 2010)

John Rogers, MD, MPH (Preclerkship Collaborative Workgroup); Ann O'Brien-Gonzales, PhD and Lauren Oshman, MD (Family Medicine Clerkship/Post Clerkship Workgroup); and [Ardis Davis](#), MSW (FMCR Project Manager)

OVERVIEW

Healthy People 2010 is a comprehensive set of health objectives to be achieved by the first decade of this century. It is designed as a roadmap for improving the health of all people in the United States. Within HP2010 has been defined a set of health priorities that reflect ten major public health concerns in the United States. These ten Leading Health Indicators have been defined by HP2010 with the intent of helping individuals understand the importance of health promotion and disease prevention:

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Subject Topic	Public Health Challenge
Physical Activity	Promote regular physical activity
Overweight and obesity	Promote healthier weight and good nutrition
Tobacco Use	Prevent and reduce tobacco use
Substance abuse	Prevent and reduce substance abuse
Responsible sexual behavior	Promote responsible sexual behavior
Mental health	Promote mental health and well-being
Injury and violence	Promote safety and reduce violence
Environmental quality	Promote healthy environments
Immunization	Prevent infectious disease through immunization
Access to health care	Increase access to quality health care

LEARNING GOALS AND OBJECTIVES (Organized by ACGME Competencies)

Below are indicated goals and objectives for medical student education designed to equip medical students with the knowledge and skills necessary for them to have an impact on these healthy behaviors/leading indicators. It is the intent of this educational resource to provide faculty and students with a guide to how best incorporate the teaching of HP2010 and the influence on healthy behaviors in medical education.

The starred (*) objectives are ones that are most appropriately addressed during the later stages of medical education (i.e., more suitable for more experienced students and clinical rotations).

Patient Care

GOAL: Students will understand the physician's role in health promotion and preventive medicine activities.

OBJECTIVES: Students will be able to:

- Describe the physician's role in health promotion, patient education, community advocacy, and preventive medicine activities.
- Describe the role of periodic preventive health assessment and routine preventive services.
- Describe the importance of period health examination and provision of preventive services.
- Describe the efficacy of screening across the lifespan.
- Describe the role of behavior as a cornerstone of health promotion.
- * Describe the principles of promoting behavior change for health-related behaviors, such as diet, smoking, sexual activity, and violent behaviors.
- * Demonstrate the ability to take a prevention-oriented history, including risk factors, occupational and environmental history, prior preventive services, and pertinent review of systems.
- * Demonstrate how to conduct a periodic health examination and assessment of children and adults, including physical examination pertinent to screening.
- * Describe the opportunities for prevention services in hospitalized patients.

Medical Knowledge

GOAL: Students will gain an understanding of the concept of prevention and preventive medicine.

OBJECTIVES: Students will be able to:

- List the most common causes of death for all age groups and common causes of death specifically for each group.
- Describe the genetics of the diseases associated with the most common causes of death.
- Describe the ten HP2010 Leading Health Indicators.
- Differentiate primary, secondary, and tertiary prevention.
- Describe the principles and components of prevention, screening, health maintenance, and health care.
- Describe the concept of a risk factor.
- Describe and list risk factors for preventable diseases.
- Describe the concept of modifiable risk factors.
- * Outline preventive strategies across all ages in the lifecycle.
- * Differentiate preventive recommendations based on expert opinions from recommendations based on evidence-based studies.
- * List the US Preventive Services Task Force Guidelines for all ages.
- Describe the principles of immunization.
- * List the recommended immunizations by age across the lifecycle.
- * Describe principles of injury prevention (passive versus active) and specific examples.

* Starred objectives lend themselves to teaching during core clerkships more than during basic sciences.

Practice-Based Learning and Improvement

GOAL: Students will understand how to monitor and optimize provision of preventive services.

OBJECTIVES: Students will be able to:

- Describe methods of monitoring compliance with preventive services guidelines.
- * Describe practice strategies to optimize provision of services.
- * Describe how to keep current with preventive services recommendations.

Interpersonal and Communication Skills

GOAL: Students will understand how to communicate with patients on prevention issues.

OBJECTIVES: Students will be able to:

- Describe the role of behavior as a cornerstone of health promotion.
- Describe how the behavioral aspects of health habits may be modified.
- * Demonstrate the ability to communicate with patients about the role of behaviors in health promotion and disease prevention and about behavior change.

Professionalism

GOAL: Students will understand how to balance the benefits to society of advocacy for preventive medicine with the needs and preferences of patients.

OBJECTIVES: Students will be able to:

- Describe the health and financial benefits to society of preventive services.
- Describe how individual patients' preferences and needs may be in conflict with those of society.
- * Describe how to negotiate with patients about this conflict.

Systems-Based Practice

GOAL: Students will understand the concept of population-based medicine.

OBJECTIVE: Students will:

- Describe principles of population-based medicine, including the "one to many" approach to care.
- Compare and contrast the care of populations of patients to care of individual patients.
- Describe the concept of "at risk" populations.
- Describe how financial, cultural, and community dimensions affect access to preventive services.
- Describe the concept of food safety and food-borne illnesses and the role of public health officials in ensuring the safety of food products.

EDUCATIONAL METHODS AND RESOURCES

The knowledge and attitudes for health promotion and disease prevention are best learned in an interactive environment. For this reason, a variety of strategies may be used to facilitate student learning. Basic knowledge can be transmitted through lectures, computer-assisted instruction (such as Web-based curricula), or readings, but understanding and applying the material to actual patient care problems is best accomplished in small-group experiences with active problem solving. Additionally, attitudes toward health promotion and disease prevention and preventive medicine concepts need reinforcement during clinical experiences where students reflect on the prevention issues related to patients they are seeing. Mentoring relationships with practicing physicians can reinforce the principles of health promotion and disease prevention. Service learning in public and private agencies that deal with health promotion and disease prevention provides opportunities for experiential learning. Reflection on those experiences, through reflective journals or reflection groups, draws out the lessons learned.

Curricular Resources

- The Healthy People Curriculum Task Force, sponsored by the Association of Teachers of Preventive Medicine and the Association of Academic Health Centers, has developed a Clinical Prevention and Population Health Curriculum Framework that is available at http://www.atpm.org/taskforce/HPC_Taskforce.html
- Additionally, the Community-Campus Partnerships for Health (CCPH) Curriculum Guide for Community Health and Tool Kit can be accessed at: <http://depts.washington.edu/ccph/guide-healthypeople.html>

Published Material

- Academic Medicine Special Supplement: January 2000. Getting Preventive Medicine into the Curriculum.

Web Sites

- See above under #1 Curricular resources and http://www.atpm.org/publications/list_publications.htm
- HP 2010 website <http://www.healthypeople.gov/>

ASSESSMENT STRATEGIES

The full application of health promotion and disease prevention requires an ongoing clinical practice with information systems that allow retrieval of practice information and data from patient records. Preclerkship students need to learn the attitudinal and intellectual foundations that can be applied later to their residency practices. Assessment of students' knowledge should be case-based and could include multiple-choice questions, short answers, essays, reflective journals, self-assessment, and portfolios. Videotaping of patient encounters and standardized patient evaluations, participation in small-group discussions, tests for specific examination skills, observations during patient care, Socratic questioning of individual students, and structured opportunities for individual and group reflection are other methods

that can be used.

Family Medicine Curriculum Resource Project (HRSA Contract No. 240-00-0107)
Preclerkship Collaborative Workgroup and Family Medicine Clerkship Post Clerkship
Workgroup Healthy People 2010 Special Topic Outline

Revised September 20, 2004.

For questions or comments, please contact [Webmaster](#) or [Ardis Davis](#)

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INFORMATICS

Mark Quirk, EdD and [Richard Usatine](#), MD (Family Medicine Clerkship/Post Clerkship Workgroup), Rick Ricer, MD (Preclerkship Collaborative Workgroup), and [Ardis Davis](#), MSW (FMCR Project Manager), with input from STFM Group on Evidence-Based Medicine.

OVERVIEW

Medical informatics is the scientific discipline that promotes the effective presentation, analysis, management, and application of scientific information in health care for the purposes of clinical problem-solving and health promotion. The British Medical Informatics Society defines it as ". . . the understanding, skills, and tools that enable the sharing and use of information to deliver healthcare and promote health." The American Medical Informatics Association states that a common theme in medical informatics has been the emphasis on technology as an integral tool to help organize, analyze, manage, and use information. The discipline of medical informatics links closely with the field of evidence-based medicine, which emphasizes the judicious use of best evidence to promote effective and efficient health care. Medical informatics involves mastery of information to enhance the practice of evidence-based medicine (EBM).

TOPIC LEARNING GOALS AND OBJECTIVES (Organized by ACGME Competencies)

The starred (*) objectives are ones that are most appropriately addressed during the later stages of medical education (i.e., more suitable for more experienced students and clinical rotations).

Patient Care

GOAL: Students will use technology, available electronic information, and population data to maximize quality of patient care.

OBJECTIVES: Students will be able to:

- * Use Web-based and PDA technologies to support patient education and disease prevention activities.
- Integrate EBM data into a biopsychosocial approach to problem solving.
- * Interpret a patient's test results with an understanding of the characteristics of the test (e.g., PPV, NPV) and the person (Family Hx, Social Hx).

Medical Knowledge

GOAL: Students will find and critically appraise the best evidence to make informed, up-to-date clinical decisions.

OBJECTIVES: Students will be able to:

- Review Web site and identify appropriate resources based on established criteria for filtering quality.
- Use search engines to identify EBM resources to answer clinical questions.
- Select the EBM site(s) most appropriate for answering different types of clinical questions.
- Analyze research designs and sampling techniques.
- Interpret statistical significance and probability.
- * Become proficient in the use of handheld computers to access information at the point of contact with patients.

Practice-Based Learning and Improvement

GOAL: Students will engage in systematic reflection of current practice in relation to the broader community.

OBJECTIVES: Students will be able to:

- Assemble and analyze the health of a community, which includes census, vital statistics, and public health data.
- * Use a Quality Improvement protocol within a practice to understand the utility of the instrument.

Interpersonal and Communication Skills

GOAL: Students will utilize technology to enhance communication with patients and peers.

OBJECTIVES: Students will:

- Communicate with patients, students, staff, and faculty via e-mail and listservs.
- Make professional presentations using PowerPoint, the Internet, and other technologies.
- Counsel patients about selection of appropriate Web sites, and caution patients about the potential for misuse of personal information they give to Web sites.

Professionalism

GOAL: Students will establish and adhere to high personal standards in the use of information technology for learning and patient care.

OBJECTIVES: Students will be able to:

- Learn to assess, evaluate, and use information resources for lifelong learning (including commitment to increasing computer skills).
- Use appropriate security procedures to respect patient confidentiality with regard to accessing and communicating patient information.

Systems-Based Practice

GOAL: Students will appraise and utilize the best practice guidelines based on the most current available information.

OBJECTIVE: Students will be able to:

- * Develop a critical approach to making health care decisions for individuals and groups by using quality indicators (e.g., USPSTF, HEDIS), community and national health data, guidelines (e.g., AHRQ, managed care), drug formularies, cost data, and EBM applications (on the Internet or PDA).
- Use the National Guideline Clearinghouse(TM) as a resource for finding and evaluating evidence-based clinical practice guidelines.
<http://www.guidelines.gov/>

EDUCATIONAL METHODS AND RESOURCES

Teaching Strategies

- A number of articles have been written about teaching with information technology. Some involve teaching at the point of care and others rely on workshops, lectures, or small groups. Here is a selection of available articles:
 - Bertling CJ, Simpson DE, Hayes AM, Torre D, Brown DL, Schubot DB. Personal digital assistants herald new approaches to teaching and evaluation in medical education. *WMJ*. 2003;102(2):46-50.
[Abstract](#) at PubMed
 - Fischer S, Stewart TE, Mehta S, Wax R, Lapinsky SE. Handheld computing in medicine. *J Am Med Inform Assoc*. 2003 Mar-Apr;10(2):139-49.
[Article](#) at PubMed Central.
 - Nesbitt TS, Jerant A, Balsbaugh T. Equipping primary care physicians for the digital age. The Internet, online education, handheld computers, and telemedicine. *West J Med*. 2002 Mar;176(2):116-20.
[Reference](#) at PubMed.
 - Usatine R. Teaching and Practicing Medicine with Hand-Held Computers. *Family Medicine*. 2002 Nov/Dec; 34(10):719-20.
[Reference](#) at PubMed
 - Monroe A, Usatine RP. Collaborative Teaching and Learning. Module 9 of the Preceptor Education Project- 2 nd ed., Society of Teachers of Family Medicine, 1999.
[PEP 2](#)
 - Articles from *The Teaching Physician*, available by [subscription](#) through STFM
 - Usatine R. Useful web sites for preceptors, Spring 2002.
 - Usatine R. Information technology and teaching in the office. Using digital photography to teach and learn medicine part I--Introduction, Fall 2002.
 - Usatine R. Using digital photography to teach and learn medicine part II--How to choose a digital camera and asking permission to take a picture. January 2003, 2(1).
 - Usatine R. Using digital photography to teach and learn medicine part III--How to take the best photographs. April 2003, 2(2).
 - Usatine R. Information technology and teaching in the office. The best free on-line journals. July 2003, 2(3).

- McGowan JJ and Berner ES: Proposed curricular objectives to teach physicians competence in using the World Wide Web. Acad Med. 2004 79(3): 236-240. [Abstract](#) at PubMed.
- Thomas PA, Kern DE. Internet resources for curriculum development in medical education: an annotated bibliography. J Gen Intern Med. 2004 May;19 (5 Pt 2):599-605. [Abstract](#) at PubMed.
- This field is changing so rapidly that it is best to view [search the NLM](#) and the Internet for the newest teaching methods for IT.

Web Sites

- STFM Web site's collections of links for Medical Informatics and other pertinent topics:
<http://www.stfm.org/links/links.html>
- <http://www.Dianexus.org/Dynamed>

PDA Resources

- <http://www.pdacortex.com/>

AAFP Technology List

- PubMed - A service of the National Library of Medicine
<http://www.ncbi.nlm.nih.gov/entrez/query.fcgi>
- Directories (classified collections for browsing)
 - HealthWeb - resources selected by medical librarians
 - [HON-Select](#) - resources selected by the [Health on the Net Foundation](#)
 - [Open Directory Project](#) - Health - resources selected by [DMOZ](#) health editors
 - [Yahoo - Health](#) - resources selected by [Yahoo](#) editors
 - Search Engines (indexed databases for keyword searching)
 - [HON-MedHunt](#) - provided by the Health on the Net Foundation
 - [Google](#)
 - [Teoma](#)
- Bandolier -- Site with evidence (from a variety of sources) on common primary care problems
<http://www.jr2.ox.ac.uk/Bandolier/index.html>
- The Cochrane Database - The premier source of evidence-based information in the world
<http://www.update-software.com/cochrane/abstract.htm>
- Centre for Evidence-based Medicine -- The center has been established in Oxford as the first of several centers around the country whose aim broadly is to promote evidence-based health care and provide support and resources to anyone who wants to make use of them.
<http://cebm.jr2.ox.ac.uk/>
- Journal of Family Practice's monthly feature called POEMs (Patient-oriented Evidence That Matters)
<http://www.infopoems.com/>
- Users' Guides to Evidence-Based Practice -- Information about how to apply evidence-

based medicine to practice, including practice guidelines, outcome analyses, utilization analyses, and more.

http://www.cche.net/principles/content_all.asp

- Great index of medical Websites kept updated by Nancy Clark at FSU.
<http://www.med.fsu.edu/library/MoreMedicalWebsites.asp>
- PDA Website resource:
<http://www.med.fsu.edu/library/PDAWebsites.asp>

ASSESSMENT STRATEGIES

- <http://www.fammed.washington.edu/ebp/ebp.html>
- <http://www.dynamicmedical.com/acgmetools>

PowerPoint Presentations

- Community Faculty Development Center (CFDC) Faculty Developers' Toolbox
<http://umassmed.edu/cfdc>
- Centre for Evidence Based Medicine
http://cebm.net/learning_ebm.asp

General Teaching/Other Faculty Development Resources

- Community Faculty Development Center (CFDC) Faculty Developers' Toolbox
PowerPoint presentations, printed material, videotapes, conferences, and interactive exercises
<http://umassmed.edu/cfdc>
- PEP2 - Overhead masters, videotapes, printed material
<http://stfm.org/pep/pep2.html>
- The Expert Preceptor Interactive Curriculum
<http://www.med.unc.edu/epic/welcome.htm>
- Florida State University's Informatics links and resources
<http://med.fsu.edu/informatics/>

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Oral Health

Jeffrey Stearns, MD (Preclerkship Collaborative Workgroup) and David Schneider, MD (Family Medicine Clerkship/Post Clerkship Workgroup) and Ardis Davis, MSW, FMCR Project Manager.

Consultant Authors: Alan Douglass, MD, and Joanna Douglass, BDS, DDS, Family Practice Residency Program; Middlesex Hospital and the University of Connecticut Schools of Medicine and Dental Medicine; and Paul E. Gates, DDS, Bronx-Lebanon Hospital Center

Contributing input from: Wendy Mouradian, MD, and Sara Kim, PhD, University of Washington HRSA funded Interdisciplinary Children's Oral Health Promotion Project

OVERVIEW

In the Surgeon General's Report on Oral Health in America, oral health is defined as "encompassing all the immunologic, sensory, neuromuscular, and structural function of the mouth and craniofacial complex. Oral health influences and is related to nutrition, communication, self-image and societal functioning."

Oral health is a critical component of overall health and must be included in the provision of health care and the design of community programs. Disparities exist across population groups at all ages, and access to appropriate dental care is frequently lacking. More than one-third of the U.S. population (100 million people) has no access to community water fluoridation. Over 108 million children and adults lack dental insurance, which is more than twice the number that lack medical insurance. Physicians can have a significant impact in improving access to care through patient advocacy within their communities.

The role of primary care physicians in the area of oral health is being increasingly recognized as vital to the effective delivery of health care in the United States. Most patients have a medical home, but many fewer have a dental home. Dental caries and periodontal disease are highly prevalent, oral lesions are common, and many systemic diseases have oral manifestations of systemic diseases and therapies occur frequently. Family physicians are often the first health care professionals to see patients with oral pain or trauma, and they provide well care and preventive services for a large proportion of the nation's children and adults. In short, family physicians can significantly reduce the burden of oral disease through screening, prevention, and facilitating appropriate dental referral. The importance in partnering with the dental profession around oral health education, in particular with regard to teaching about oral health in pediatric populations, is clear.

An understanding of the interrelationships between oral and systemic disease is vital for physicians. Associations between periodontal disease and diabetes are well documented. New research points to associations between chronic oral infections and cardiovascular disease and low-birth-weight, premature births. In caring for these patients there is a critical need for clear and effective communication between medical and dental professionals.

TOPIC LEARNING GOALS AND OBJECTIVES (Organized by ACGME Competencies)

Patient Care

GOAL: Students will appropriately interview and examine patients and accurately identify the manifestations of oral disease and its risk factors.

OBJECTIVES: Students will:

- Perform an appropriate oral health history focusing on identification of risk factors for oral diseases.
- Perform an appropriate dietary history focusing on factors that increase the risk of oral diseases such as tobacco and alcohol use and the frequency of sugar intake.
- Perform an appropriate oral examination that effectively visualizes all intra-oral hard and soft tissue, and identifies normal landmarks.
- Correctly identify common oral abnormalities including dental caries, periodontal disease, oral infections, and common benign and malignant oral lesions.
- Generate an appropriate differential diagnosis for common abnormal oral findings.
- Appropriately document oral findings and diagnoses.

GOAL: Students will understand the importance of preventive care in the maintenance of oral health.

OBJECTIVES: Students will be able to counsel patients and families appropriately regarding:

- Appropriate diet for all age groups, with a focus on factors that increase the risk of dental caries such as frequency of sugar consumption.
- Avoidance of unhealthy habits that increase oral cancer risk such as alcohol and tobacco use.
- Brushing and flossing.
- Appropriate intervals for dental care and selection of an appropriate dental professional.
- Systemic fluoride supplementation in children.
- Appropriate use of fluoride varnish under special circumstances.
- Prevention of oral trauma and the use of facemasks and mouth guards.
- Links between oral and systemic disease.

Medical Knowledge

GOAL: Students should understand normal anatomy and function of the oral cavity.

OBJECTIVES: Students will:

- Correctly identify normal anatomy.
- Describe the function of the muscles, salivary glands, teeth, and temporomandibular joint.
- Describe common developmental abnormalities of the oral cavity and their impact on function.
- Describe the neural functioning of the head and neck.

GOAL: Students will learn the epidemiology and pathophysiology of oral health diseases, and how oral health problems affect patients' ability to live with other chronic illnesses.

OBJECTIVES: Students will:

- Describe the relationships between oral diseases and systemic diseases, including the oral manifestations of tobacco use (either smoked or chewed), systemic medications, alcohol use, autoimmune disease, and immune deficiency, and associations with cardiovascular disease, pregnancy, and diabetes mellitus.
- Describe the incidence and prevalence, risk factors, and pathophysiology of:
 - Early childhood caries
 - Adult caries
 - Periodontal disease
 - Common benign oral lesions including tori, cystic lesions, ulcerations, and white lesions
 - Oropharyngeal neoplasms
 - Chronic facial pain
 - Temporomandibular joint disorders
 - Craniofacial birth defects
 - Facial trauma
 - Oral infections caused by viruses, fungi, and bacteria
 - Common neural disorders of the head and neck, including trigeminal neuralgia and facial nerve palsies
 - The oral manifestations of autoimmune disorders
- Describe the diagnosis and management of common dental emergencies including:
 - Dental pain
 - Peri-apical and periodontal abscesses
 - Cellulitis and infection of the deep spaces of the head and neck
 - Dental trauma, including tooth luxation and avulsion
 - Pericoronitis
 - Complications of dental extractions

GOAL: Students will understand common points of intersection between medical and dental care, and the physician's role in those situations.

OBJECTIVES: Students will:

- Understand the risks and indications for temporary cessation of anticoagulation therapy in preparation for dental surgery.
- List the indications and appropriate dosing for the administration of antibiotic prophylaxis prior to dental procedures to reduce the risk of infection of cardiac structures and implanted medical devices per American Heart Association guidelines.

Practice-Based Learning and Improvement

GOAL: Students will understand how screening for oral health in primary care can identify patients in need of oral health treatment and how this can yield to improved patient care outcomes.

OBJECTIVES: Students will:

- Identify screening methods that can be used by a primary care physician to detect oral health problems in a primary care physician's practice.
- Describe how screening can yield improved patient care outcomes.

GOAL: Students will demonstrate appropriate self-directed learning and application of evidence to knowledge acquisition.

OBJECTIVES: Students will:

- Choose appropriate print and electronic resources.
- Appropriately utilize those resources in a self-directed manner.
- Recognize the importance of basing knowledge acquisition and clinical decision making on evidence-based resources.

Interpersonal Communication Skills

GOAL: Students should communicate effectively with patients around oral health issues.

OBJECTIVES: Students will:

- Create and sustain effective therapeutic relationships.
- Effectively communicate the importance of oral health in the context of total health.
- Demonstrate sensitivity to race, religion, gender, age, and cultural issues.

Professionalism

GOAL: Students will demonstrate professionalism in the care of patients with oral health needs.

OBJECTIVES: Students will:

- Maintain confidentiality.
- Act professionally at all times.

Systems-Based Practice

GOAL: Students will recognize the role of the primary care physician in maintaining oral health, and how it is influenced by barriers to care and social and cultural determinants of health.

OBJECTIVES: Students will be able to:

- Articulate the public health argument for the need for fluoridation of the public water supply.
- Recognize current barriers to access to dental care, and advocate for patients in circumventing them.
- Work within their communities to improve access to dental care.
- Appropriately partner with case managers and coordinate care with other health care professionals.
- Facilitate effective communication between medical and dental professionals.

- Discuss factors that impact oral health in multicultural populations.

EDUCATIONAL METHODS AND RESOURCES

Teaching Strategies

- Case-based learning using visual/auditory adjuncts
- Standardized patient interviews to develop communication skills
- Case-based lectures
- Clinical experiences (see below)

Integration Strategies

- During interview training, utilize patient instructors with oral disease histories.
- Link oral health material with the goals and objectives of Healthy People 2010 and teaching on public health strategies for population health.
- Emphasize treatment of oral disease on specific clerkships.
- Include oral health topics in physiology/pathology course.
- Emphasize the comprehensive oral examination and recognition of dental caries, enamel defects, periodontal disease, and common oral lesions during physical examination course, with reinforcement on specific clerkships.
- Include oral health topics in discussions of the effects of socioeconomic status on illness.
- Include oral health topics during training in patient education.

Clinical Experience

- Oral examination of children and counseling of their parents at routine well child visits.
- Oral examination and counseling of adults at routine office visits in the primary care setting.
- ENT, oral surgery, or dental clinic experiences.
- Observations of interviews that involve cross-cultural issues and subsequent group discussion or journaling.
- Observations of care in community health settings such as screening programs, daycare centers, Head Start, etc.
- Participation in patient education activities in community health settings.

Lectures

- PowerPoint lecture on infant oral health is available through the University of Connecticut's oral health Web site at <http://oralhealth.uhc.edu>
- The American Academy of Pediatrics is developing a PowerPoint lecture on infant oral health that will be available through their Web site. It goes live November 1, 2004. Contact Wendy Nelson in the AAP Division of Community Pediatrics at 1-800-433-9016 x7789.
- Lectures will be available on Web sites through the University of Washington, University of Kentucky, and University of Texas at San Antonio's Interdisciplinary Children's Oral Health Promotion Projects that will go live in the first quarter of 2005.

Independent Learning

- Journaling in conjunction with observations of interviews
- CD-ROMs self-instructional tools
- Web-based instructional modules
- Core textbook
- Compilation of relevant articles (either in print or computer-based)

Curricular Resources

- **University of Connecticut Oral Health Web-based Curriculum**

<http://oralhealth.uhc.edu/>

Provides extensive resources on infant oral health including a downloadable and viewable PowerPoint lecture, case-based exercises, fluoridation information, and handheld downloads.

Interdisciplinary Children's Oral Health Promotion Projects

Modules developed through HRSA Cooperative Agreements to educate family practice residents on oral health in child populations at the University of Washington, University of Kentucky, and the University of Texas at San Antonio). They are anticipated to go live in the first quarter of 2005.

- **National Maternal and Child Oral Health Resource Center**

<http://www.mchoralhealth.org/default.html>

This provides links to 2 well-designed on-line learning modules on child oral health: Open Wide (<http://www.mchoralhealth.org/OpenWide/index.htm>) and A Health Professional's Guide to Pediatric Oral Health Management (<http://www.mchoralhealth.org/PediatricOH/index.htm>). These modules include information on performing oral screening, identifying infants and children at risk for oral health problems, coordinating referrals to oral health professionals, and providing parents with anticipatory guidance.

Published Material for Learners

- USDHHS. Oral Health in America: A Report of the Surgeon General. <http://www2.nidcr.nih.gov/sgr/sgrweb/welcome.htm>
- Weinberg MA and Estefan DJ. Assessing oral malignancies. *Am Fam Physician*. 2002;65:1379-84,1385-6. <http://www.aafp.org/afp/20020401/1379.html>
- American Academy of Pediatric Dentistry. Guideline on fluoride therapy. *Pediatric Dentistry*. 2002; 24(7): 66-67. UPDATE
- Douglass AB and Douglass JM. Common Dental Emergencies. *Am Fam Physician*. 2003; 67(3): 511-516
- Douglass JM, Douglass AB, Silk H. A Practical Guide to Infant Oral Health. *Am Fam Physician*. December 1, 2004. (in press).
- Douglass AB et al. Oral Health for the Family Physician. *FP Essentials*, Edition No. 304, AAFP Home Study. Leawood, Kansas: American Academy of Family Physicians, September 2004.

Published Material for Teachers

- Graham E, Negron R, Domoto P, Milgrom P. 2003. Children's oral health in the medical curriculum: A collaborative intervention at a university-affiliated hospital. *J Dent Educ.* 67(3): 338-347
- Mouradian WE, Schaad DC, Kim S, Leggott PJ, Domoto PS, Maier R, Stevens NG, Koday M. 2003. Addressing disparities in children's oral health: A dental-medical partnership to train family practice residents. *J Dent Educ.* 67(8): 886-895.
- Mouradian WE, Berg JH, Somerman MJ. 2003. Addressing disparities through dental-medical collaborations, part 1. The role of cultural competency in health disparities: Training of primary care medical practitioners in children's oral health. *J Dent Educ.* 67(8): 860-868.

Published Material (Miscellaneous)

- Mouradian WE. The face of the child: children's oral health and dental education. *J Dent Educ.* 2001; 65:821-31.
- Mouradian W, Wehr L and Crall JJ: Disparities in Children's Oral Health and Access to Care. *JAMA.* Nov 22/29, 2000; 284(20): 2625-2631.
- Lewis CW, Grossman DC, Domoto PK, Deyo RA. The role of the pediatrician in the oral health of children: a national survey. *Pediatrics.* 2000; 106:1-7.
- Hendricson WD, Cohen PA. Oral health care in the 21st century: implications for dental and medical education. *Acad Med.* 2001; 76:1181-1204.
- Hale KJ, American Academy of Pediatrics Section on Pediatric D. Oral health risk assessment timing and establishment of the dental home. *Pediatrics.* 2003; 111(5): 1113-6.
- Anonymous. Recommendations for using fluoride to prevent and control dental caries in the United States. Centers for Disease Control and Prevention. *Morbidity & Mortality Weekly Report. Recommendations & Reports.* 2001 Aug 17; 50(RR-14): 1-42.
- Romito LM. 2003. Introduction to nutrition and oral health. *Dental Clinics of North America* 47(2): 187-207.
- Rozier RG, Sutton BK, Bawden JW, Haupt K, Slade GD, King RS. 2003. Prevention of early childhood caries in North Carolina medical practices: Implications for research and practice. *J Dent Educ.* 67(8): 876-885.

Web Sites

- **Healthy People 2010: Section 21, Oral Health**
<http://www.healthypeople.gov/Document/HTML/Volume2/21Oral.htm>
This site provides background information on oral health as well as the actual Oral Health 2010 objectives.
- **NIDCR National Oral Health Information Clearing House**
<http://www.nidcr.nih.gov>
Clicking on the "Health Information" icon at the top brings up an indexed list of oral health topics.
- **CDC Oral Health Resources**
<http://www.cdc.gov/oralhealth/>
This site is set up to permit searches and to browse by topic.
- **Oral Health America**
<http://www.oralhealthamerica.org>
Oral Health America is a fully independent non-profit for public benefit that follows a path of broad-based public advocacy through targeted programs and communications

efforts to improve oral health for all Americans. Of particular use at this site are the "Report Cards" that include topics such as the oral health of older Americans.

- **[Maternal and Child Health Library: Knowledge Path - Oral Health and Children and Adolescents](#)**

http://www.mchlibrary.info/KnowledgePaths/kp_oralhealth.html

This knowledge path offers a comprehensive collection of links and resources, although it may not be easy to identify the most useful resources.

- **[Children's Dental Health Project](#)**

<http://www.cdhp.org>

This site contains a wealth of resources about children's oral health, particularly issues involving access to care, financing programs, and health disparities. Of particular note is the Interfaces project that explores the relationship between medicine and dentistry in meeting the oral health needs of young children.

- **[American Academy of Pediatric Dentistry](#)**

<http://www.aapd.org>

- **[American Dental Association](#)**

<http://www.ada.org>

- American Academy of Pediatrics has developed a comprehensive Web site on infant and child oral health. It is scheduled to go live November 1, 2004. Contact Wendy Nelson in the AAP Division of Community Pediatrics at 1-800-433-9016 x7789.

ASSESSMENT STRATEGIES

- Demonstration of awareness and utilization of Web sites to solve problems and access information
- OSCE
- Clinical observation
- Physical exam course testing and demonstration of oral examination skills during specific clerkships
- Interviews of standardized patients
- Diaries identifying barriers to care and how they were approached and surmounted
- Creation of short reports after observations and self-directed learning
- Exit interviews with patients/families regarding the effectiveness of student patient education

For questions or comments, please contact [Webmaster](#) or [Ardis Davis](#)

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Special Topics

Curriculum Resources



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Substance Abuse

Christine Matson, MD (Preclerkship Collaborative Workgroup), [William B. Shore](#), MD, and David Schneider, MD (Family Medicine Clerkship/Post Clerkship Workgroup), and [Ardis Davis](#), MSW (FMCRC Project Manager), with input from the STFM Group on Behavioral Sciences.

Contributing Author and Consultant: Jeffrey Samet, MD

OVERVIEW

The majority of patients with substance abuse (SA) problems are either not detected as having substance abuse problems or detected as substance abusers but not properly assessed.

Primary care physicians can increase their ability to diagnose substance abuse problems in their patients by learning state-of-the-art approaches to detection. Additionally, primary care physicians are in an excellent position to motivate substance abusing patients to decrease or eliminate their harmful use of substances.

TOPIC LEARNING GOALS AND OBJECTIVES (Organized by ACGME Competencies)

The starred (*) objectives are ones that are most appropriately addressed during the later stages of medical education (i.e., more suitable for more experienced students and clinical rotations).

Patient Care

GOAL: Students will learn how presenting symptoms might be related to substance abuse.

OBJECTIVES: Students will be able to:

- Describe the importance of developing an early index of suspicion in patients presenting with other seemingly unrelated medical complaints.
- Describe the typical experience of substance abuse from the patient's point of view.
- * Identify features of the behavior disorders underlying substance abuse problems and methods to assess these in clinical practice.
- * Identify complications of these disorders (e.g., physical dependence, tolerance, withdrawal, and substance-associated organic mental and physical disorders).

Medical Knowledge

GOAL: Students will gain knowledge of the causes, types, and treatments of substance use disorders.

OBJECTIVES: Students will be able to:

- Define substance use, substance abuse, and substance dependence.
- List the substance abuse disorders.
- * List the risk factors for substance abuse.
- Describe society's responsibilities and the societal damage of substance abuse disorders.
- * List the signs and symptoms of substance abuse disorders.
- * List the treatment options for substance abuse disorders.
- Understand the growing number of FDA-approved medications for the treatment of alcohol and drug dependence
- * Describe the behavioral changes and modifications necessary in the treatment of substance abuse disorders.
- Explain the legal responsibilities for reporting impaired physicians.
- * Define an impaired physician.
- * Describe issues associated with substance abuse and addictive disorders among health professionals.
- * Describe the Harm Reduction model and its use in treatment of substance abuse disorders.
- * Define key terms and concepts used in substance abuse literature (e.g., "drug use behavior") and describe common patterns among addictions, including genetic, behavioral, and community-linked trends.

Practice-Based Learning and Improvement

GOAL: Students will understand the importance of on-site information about resources for patients with substance abuse problems.

OBJECTIVES: Students will be able to:

- Identify resources for patients with substance abuse problems at their clinic sites (e.g., lists of treatment referral centers, substance abuse counselors, etc.).
- Understand the strengths, limitations, and means of access to self-help programs for alcohol and drug dependence (e.g., AA, NA).
- Review patient education materials on substance abuse and treatment available at their clinic sites.
- Identify barriers for patients to access treatment programs (such as language, culture, etc.).
- Detail how a patient's health insurance will influence treatment options.

Interpersonal Communication Skills

GOAL: Students will learn how to take a substance abuse history.

OBJECTIVES: Students will be able to:

- Describe the importance of taking a substance abuse history.
- * Demonstrate obtaining a substance-abuse history.
- * Demonstrate the use of the CAGE questions or other effective screening tests for alcohol or drug problems
- * Describe a general approach to assessment, intervention, and treatment of

substance abuse disorders.

Professionalism

GOAL: Students will understand the heightened risk of substance abuse within the health professions.

OBJECTIVES: Students will be able to:

- Demonstrate professional behavior and patient respect when working with patients (or colleagues) with substance abuse disorders.
- Describe issues associated with substance abuse and addictive disorders among health professionals.
- Explain the ethical responsibility for reporting impaired physicians.

Systems-Based Practice

GOAL: Students will understand the broad-reaching impact of substance abuse on society.

OBJECTIVES: Students will be able to:

- Describe the prevalence of substance abuse in the United States and its impact upon public health, including infectious diseases (e.g., HIV or hepatitis C), injuries, and overdose.
- Define key terms and concepts used in substance abuse literature (e.g., "drug use behavior") and describe common patterns among addictions, including genetic, behavioral, and community-linked trends.

EDUCATIONAL METHODS AND RESOURCES

Clinical Experience

- * Visit alcohol and drug rehabilitation centers where students preferably can visit one patient early in recovery (i.e., in detoxification) and then again the same patient later in the recovery process.
- * Attend an Alcoholics Anonymous meeting or other 12-step meeting (with pre-meeting preparation and post-meeting debriefing.)

Electives

- Rotations in alcohol and drug rehabilitation centers and harm reduction sites (e.g., needle exchange programs)

Curricular Resources

- Project Mainstream
Project Mainstream is intended as a resource for all health care professional educators who wish to improve their teaching on substance use disorders. The welcome message from the Director, Richard Brown, MD, MPH, states that

educators are free to use and adapt anything as desired but asks educators to cite the source.

The Director of Project Mainstream, Richard Brown MD, MPH, is a family physician who was very involved in the development and implementation of the successful Project SAEFP (Substance Abuse Education for Family Physicians) in the 1990s. Project SAEFP developed modules in areas relevant to screening, and managing substance abuse within the context of primary care. The modules accessible through the Project Mainstream site are along the same (but expanded) content lines as Project SAEFP.

Available at Project Mainstream, through their Project Mainstream Syllabus, are modules on the following topics, each with a downloadable Microsoft Word document and PowerPoint presentation:

[Module 1: Introduction](#)

[Module 2: Screening and Assessment](#)

[Module 3: Intervention and Referral](#)

[Module 4: Motivational Interviewing](#)

[Module 5: Community-Based Substance Abuse Prevention](#)

[Module 6: Identifying and Assisting Children of Substance Abusing](#)

[Parents](#)

[Module 7: Continuous Quality Improvement \(CQI\)](#)

To access one of these modules,

Click on the Site PROJECT MAINSTREAM: www.projectmainstream.net

On the Left hand side, UNDER EDUCATIONAL RESOURCES,

Click on MAINSTREAM SYLLABUS.

The modules are listed and can be clicked on to retrieve the Word and PowerPoint documents.

The Word document for each module contains:

- Learning objectives
- Chronology in teaching the material over a given block of time
- Instructor materials
- Participants materials
- Talking points for the PowerPoint slides
- References

Published Material

- [MOTIVATE HEALTHY HABITS](#)

Materials developed under the leadership of Richard Botelho, MD (see address and contact information below) include a Journal issue: Education for Health's Special Issue on Influencing Health Behaviour: Implications for Teachers, Learners and Institutions . The Network: Community Partnerships for Health through Innovative Education, Service and Research, Carfax Publishing, Taylor & Francis. Ltd, Basingstoke, Hants, RG24 8PR, UK, and 325 Chestnut Street, 8th Floor, Philadelphia, PA 19106, USA. Included in the Table of Contents is a series of chapters entitled: Implications for Students. Chapters included in this section are

titled: Spreading the word: Teaching health promotion to students from disciplines other than health, and Teaching behavior change skills to first-year medical students: A small group experiential approach, and
A model for educating humanistic physicians in the 21st century: The New Medicine, Patient, and Society course at Tel Aviv University. Dr. Botelho is developing a Web-based distance learning program for students and residents.

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The Family Medicine Center

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716-442-7470 ext 508

- Adger H, Macdonald DI, Winger S. Core competencies for involvement of health care providers in the care of children and adolescents in families affected by substance abuse. *Pediatrics* ; 1999; 103:1084-1085.
- [SUBSTANCE ABUSE: A patient-centered approach](#)
ed. Michael R Floyd and J Paul Seale, respectively associate professor of family medicine and associate clinical professor of psychiatry and behavioral sciences, James H. Quillen College of Medicine, East Tennessee State University; associate professor of family medicine, Mercer University School of Medicine and Medical Center of Central Georgia. Primary care clinicians are often unfamiliar with new and effective methods for detecting substance abuse problems in their earliest stages, and the majority of patients with substance abuse problems remain undiagnosed. *Substance Abuse* is written by primary care clinicians and focused to meet the needs of primary care providers, demonstrating how the patient-centered clinical method can assist clinicians in learning how to diagnose this complex psychosocial disorder. This book describes how to use state-of-the-art screening techniques, and how to understand and motivate patients to decrease or eliminate harmful use of alcohol and drugs. It presents the latest scientific findings and gives examples of using a patient-centered approach, as well as describing specific communication skills, with samples of dialogue illustrating their use in helping substance-abusing patients. This is essential reading for all family doctors, pediatricians, gynecologists, psychiatrists, nurses, social workers, psychologists, and all clinicians whose practices include substance abusing patients. It will also appeal to counselors, education personnel, and all professionals working with substance abusing individuals.
- National Institute of Alcohol Abuse and Alcoholism (NIAAA) guide to Physicians (this document is updated every few years).
- U.S. Preventive Task Force Guidelines for Screening. The recommendations with regard to alcohol have been recently updated, as have the drug abuse and smoking recommendations. The Volume 140 (7) April 6, 2004 issue of the *Annals of Internal Medicine* contains several papers concerning recommendations on alcohol.
<http://www.annals.org/content/vol140/issue7/>
- Friedmann R, Saitz R, Samet JH. Management of adults recovering from alcohol or other drug problems: relapse prevention in primary care. *JAMA*. 1998; 279:1227-1231.

- Samet JH , Rollnick S, Barnes H. Beyond CAGE: a brief clinical approach after detection of substance abuse. *Arch Intern Med* . 1996; 156:2287-2293.
- Fiellin DA, Reid MC, O'Connor PG. Screening for alcohol problems in primary care: a systematic review. [PMID: 10888972] *Arch Intern Med*. 2000;160:1977-89.

Lectures

- See Under Curricular Resources: the Project Mainstream Web site <http://www.projectmainstream.net>, where one can find PowerPoint presentations for lectures on various topics.

Web Sites

- <http://www.projectmainstream.net> - See Reference to Project Mainstream under Curricular Resources.

Family Medicine Curriculum Resource (FMCRC) Project HRSA Contract 240-00-0107. If you have comments about this material, please contact please contact [Ardis Davis](mailto:ardisd7283@aol.com), Project Manager at ardisd7283@aol.com

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