

ATPM

ASSOCIATION OF TEACHERS
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CORE COMPETENCIES IN DISEASE PREVENTION AND HEALTH PROMOTION FOR UNDERGRADUATE MEDICAL EDUCATION

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CLINICAL PREVENTION

- *Core/Minimum Expected Outcomes*
 - The basic curriculum should prepare students to:
 1. Using existing sources of health data, name the major causes of morbidity and mortality in the United States, based on age and gender, and the important modifiable risk factors for each.
 2. Identify recommended clinical preventive services based on patient's age, sex, and risk factor status using appropriate guidelines (such as the U.S. Preventive Services Task Force (USPSTF), Advisory Committee on Immunization Practice recommendations, or other appropriate guidelines):
 - a. Screening tests commonly used in primary care (e.g., Pap test, mammography, BP measurement, blood lead)
 - b. Prevention counseling (e.g., smoking cessation, dietary modification, exercise, injury prevention, and reproductive health)
 - c. Immunizations
 - d. Chemoprophylaxis (e.g., aspirin, hormone-replacement therapy, lipid-lowering drugs)
 3. Demonstrate the communication and psychomotor skills required to directly provide appropriate, recommended clinical preventive services, including:
 - a. Obtaining an appropriate patient history (occupation, environmental exposure, recent travel, psychosocial, sexual, substance use/abuse, including prescription drugs and over-the-counter medications)
 - b. Performing screening tests (e.g., Pap test, clinical breast exam, BP measurement, substance abuse screening)
 - c. Conducting prevention counseling (e.g., smoking cessation, diet modification, exercise, injury prevention, domestic violence, trauma prevention)
 - d. Managing immunizations (e.g., counseling re: indications and potential side effects, technique for administration)
 - e. Prescribing chemoprophylaxis (e.g., counseling re: indications for and potential side effects with aspirin prophylaxis, hormone-replacement therapy)
 - f. Utilizing antimicrobial prophylaxis when appropriate
 4. Understand features of health systems that promote the integration and utilization of disease prevention-health promotion services into clinical practice (e.g., use of reminder systems for providers and consumers).
 5. Describe the clinical, ethical, and legal issues associated with case-finding and screening programs, including:
 - a. Potential negative effects of labeling
 - b. False-positive and false-negative tests
 - c. Detection of untreatable conditions
 - d. Lack of follow-up of positive findings
 - e. Accuracy of screening tests

6. Identify the roles of various health care providers, interdisciplinary health care teams, consultation/referral sources, and community resources in providing clinical preventive services and complementary clinical care (e.g., use of dietician in weight loss, social worker in child abuse cases, alternative medicine).
7. Understand the transmission of disease in clinical settings and demonstrate knowledge and skills necessary to take universal precautions.

QUANTITATIVE SKILLS CURRICULUM

- *Core/Minimum Expected Outcomes*
 - The basic curriculum should prepare students to:
 1. Define and interpret measures that describe the burden of disease in a population (e.g., incidence, prevalence, age-adjusted rates, case fatality rates, life expectancy, quality-adjusted life years).
 2. Demonstrate understanding of the concept of epidemic occurrence of disease and how to investigate an epidemic.
 3. Demonstrate an understanding of the commonly used measures of association (e.g., relative and attributable risk, odds ratio, the principles of cause and effect).
 4. Define and apply the principles of quantitative epidemiology (e.g., sensitivity, specificity, positive predictive value, validity, and reliability) to diagnostic and screening tests.
 5. Demonstrate the skills necessary to critically evaluate and translate to clinical practice medical and scientific research reports, including the following concepts:
 - a. Appropriateness and correctness of study design
 - b. Methods of data collection
 - c. Sources of bias and confounding
 - d. Correct interpretation of results
 - e. Standards of evidence
 - f. Determination of the effectiveness of preventive interventions
 - 6. Describe the basic concepts and tools of statistical application, including the following:
 - a. Concept of discrete and continuous measures
 - b. Measures of central tendency: range, mean, median, standard deviation, variance
 - c. Concepts of associations and differences: type I and type II errors, differences in populations, associations between variables, statistical significance testing, and confidence intervals

- d. Methods for collection and use of vital statistics, health status data, and health services data to analyze population characteristics, health trends, and health needs
 - e. Understand basic concepts of survival analyses
7. Describe and interpret the basic elements of the following study designs commonly found in the medical and public health literature:
- a. Cross-sectional
 - b. Case-control
 - c. Cohort
 - d. Randomized clinical trial
 - e. Quasi-experimental/historical and concurrent

HEALTH SERVICES ORGANIZATION AND DELIVERY

- *Core/Minimum Expected Outcomes*
 - The basic curriculum should prepare students to:
 1. Identify the structure and functions of the public health system (local and state health departments, U.S. Department of Health and Human Services) and the roles of public health agencies in monitoring and maintaining the health of the community (e.g., assessment, policy development, assurance) and other organizations involved in the delivery of health services in the United States (e.g., hospitals; managed care organizations; ambulatory, rehabilitative, and long-term care facilities; home care agencies).
 2. Describe the common methods of health care financing in the United States for preventive, curative, and rehabilitative services and the implications these payment systems have for health.
 3. Identify the social, economic, and political forces that influence health status and health care services in the United States.
 4. Name the methods used to assess the quality of health care (e.g., HEDIS, patient satisfaction surveys, peer review organizations (PROs), utilization review, continuous quality improvement (CQI)).
 5. Describe how health professionals and practice are regulated and governed (e.g., principles of tort liability, informed consent, confidentiality, licensure, clinical privileges, ethical standards in research).
 6. Describe the influences of access, utilization, and quality of services on health outcomes (e.g., birth outcomes based on access to and utilization of prenatal care).
 7. Describe the basic principles and value of economic analysis (e.g., cost-effectiveness analysis, cost-benefit analysis).

COMMUNITY DIMENSIONS OF MEDICAL PRACTICE

- *Core/Minimum Expected Outcomes*

- The basic curriculum should prepare students to:
 1. Describe the components of a community-responsive population-based health intervention such as the processes of:
 - a. Identifying the target population
 - b. Identifying the health needs of the target population
 - c. Prioritizing health needs
 - d. Developing appropriate intervention(s) to address health needs, including community-based actions such as legislation, toxic waste clean-up, worksite injury prevention, nonsmoking policies, healthy school menus
 - e. Evaluating the impacts of intervention(s)
 - f. Modifying future intervention(s) based upon evaluation
 2. Describe how the characteristics of individuals and populations may affect the occurrence of disease and the provision and utilization of health services (e.g., language, religious beliefs, income, education, culture, race, ethnicity, lifestyle).
 3. Identify potential adverse health outcomes for defined populations at risk within the community and appropriate clinical preventive services to address them, including the vulnerable (e.g., elderly, disabled, homeless, immigrants), institutionalized (e.g., correctional facilities, nursing home residents), and occupationally related (e.g., agricultural, coal miners, health professionals).
 4. Describe physicians' responsibilities to public agencies (e.g., reporting of adverse drug events to the Food and Drug Administration (FDA), reporting of notifiable diseases to the state or local health department, report of child abuse to legal authorities).
 5. Describe important aspects of global health (e.g., regional epidemiology, population control, risk of spread of contagious disease, environmental hazards, maldistribution of health and medical services, the adverse effects of global conflict).
 6. Describe the role of the government in developing and implementing public policy for disease prevention and health promotion (e.g., through development of *Healthy People 2010*).