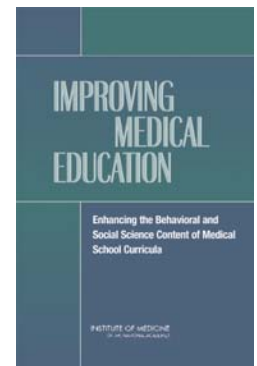


IMPROVING MEDICAL EDUCATION: ENHANCING THE BEHAVIORAL AND SOCIAL SCIENCE CONTENT OF MEDICAL SCHOOL CURRICULA

Roughly half of all deaths in the United States are linked to behavioral and social factors. The leading causes of preventable death and disease in the United States are smoking, sedentary lifestyle, along with poor dietary habits, and alcohol consumption. In addition to adverse health effects of harmful behaviors, psychological and social factors have also been shown to influence chronic disease risk and recovery. Psychological factors, such as personality, developmental history, spiritual beliefs, expectations, fears, hopes, and past experiences, shape people's emotional reactions and behaviors regarding health and illness. Social factors, including support of family and friends, institutions, communities, culture, politics, and economics, can have profound effects as well. Indeed, scientific evidence is increasing on the effects of psychological and social factors on biology, and recent studies have demonstrated that psychosocial stress may be a significant risk factor for a variety of diseases

Understanding that behavior can be changed and that proven methods are available to facilitate such change allows physicians to provide optimal interventions—behavioral and nonbehavioral—to improve the health of patients. To make measurable improvements in the health of Americans, physicians must be equipped with the knowledge and skills from the behavioral and social sciences needed to recognize, understand, and effectively respond to patients as individuals, not just to their symptoms.

A number of demographic factors in the United States also underscore the need for more attention to the behavioral and social components of health. First, the proportion of the population aged 65 and over is expected to grow by 57 percent by 2030, and with Americans now having an average life expectancy of 77 years, physicians need the knowledge and skills to care for this aging population. To this end, they must understand the interplay of social and behavioral factors (e.g., diet, exercise, and familial and social support) and the role these factors play in delaying or preventing the onset of disease and slowing its progression. A second demographic change is the rising percentage of minorities in the overall U.S. population. According to U.S. census data, 26 percent of the current population is nonwhite, a percentage that is expected to increase to almost 47 percent by 2050. The country's growing cultural and ethnic diversity presents new challenges and opportunities for physicians and other health professionals, who must become culturally competent and better skilled in communicating and



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negotiating health management with diverse populations.

The Committee on Behavioral and Social Sciences in Medical School Curricula was convened by the Institute of Medicine to provide the National Institutes of Health and The Robert Wood Johnson Foundation with a critical analysis of the behavioral and social sciences in medical schools today.

KEY QUESTIONS ADDRESSED:

Current Approaches: What are medical schools teaching students about the behavioral and social sciences?

Medical School Curricula: What topics from the behavioral and social sciences should medical schools include in their curricula?

Strategies for Incorporation: What are the barriers to incorporating behavioral and social science content into medical school curricula and how can schools overcome these barriers?

RECOMMENDATIONS:

The committee finds there is inadequate information available to sufficiently describe behavioral and social science curriculum content, teaching techniques, and assessment methodologies in U.S. medical schools and **recommends development of a new national behavioral and social science database.** It also **recommends that medical students be provided with an integrated behavioral and social science curriculum that extends throughout the four years of medical school.** The committee identifies 26 topics in six behavioral and social science domains that it believes should be included in medical school curricula. The six domains are mind-body interactions in health and disease, patient behavior, physician role and behavior, physician-patient interactions, social and cultural issues in health care, and health policy and economics.

To help overcome multiple barriers to the incorporation of the behavioral and social sciences into medical school curricula, the committee **recommends that the National Institutes of Health or private foundations establish behavioral and social sciences career development and curriculum development awards.** Moreover, concerned that the U.S. Medical Licensing Examination currently places insufficient emphasis on test items related to the behavioral and social sciences, the committee **recommends that the National Board of Medical Examiners ensure that the exam adequately covers the behavioral and social science subject matter recommended in this report.**

COMMITTEE ON BEHAVIORAL AND SOCIAL SCIENCES IN MEDICAL SCHOOL CURRICULA. NEAL A. VANSELOW, (Chair), Tulane University Health Sciences Center; ROBERT DAUGHERTY, JR., University of South Florida College of Medicine; PEGGYE DILWORTH-ANDERSON, University of North Carolina at Chapel Hill School of Public Health, Health Policy and Administration; KAREN EMMONS, Harvard School of Public Health; Dana-Farber Cancer Institute; EUGENE K. EMORY, Department of Psychology, Psychiatry, and Behavioral Sciences, Emory University; DANA P. GOLDMAN, RAND Corporation and University of California Los Angeles School of Medicine and School of Public Health; TANA A. GRADY-WELIKY, University of Rochester School of Medicine and Dentistry; THOMAS S. INUI, Regenstrief Institute for Health Care; Indiana University School of Medicine; DAVID M. IRBY, University of California San Francisco School of Medicine; DENNIS H. NOVACK, Drexel University College of Medicine; NEIL SCHNEIDERMAN, University of Miami Behavioral Medicine Research Center; HOWARD F. STEIN, Department of Family and Preventive Medicine, University of Oklahoma Health Sciences Center **IOM Project Staff (starting in 2003):** PATRICIA A. CUFF, Study Director; BENJAMIN HAMLIN, Research Assistant; JUDITH ESTEP, Senior Program Assistant. **IOM Project Staff (ending in 2003):** LAUREN HONNESS-MORREALE, Study Director; OLUFUNMILOLA O. ODEGBILE, Research Assistant; ALLISON BERGER, Program Assistant.

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