

LEARNING OBJECTIVES

The IIME Core Committee has developed the concept of "Global Minimum Essential Requirements" (GMER) and defined a set of global minimum learning outcomes, which students of the medical schools must demonstrate at the point of graduation. The "Essentials" are grouped under seven broad educational domains with set of sixty learning objectives in total. The following are the 60 learning objectives grouped by domain.

I. Professional values, Attitudes, Behaviour and Ethics

- A. Recognition of the essential elements of the medical profession, including moral and ethical principles and legal responsibilities underlying the profession.
- B. Professional values which include excellence, altruism, responsibility, compassion, empathy, accountability, honesty and integrity, and a commitment to scientific methods.
- C. An understanding that each physician has an obligation to promote, protect, and enhance these elements for benefit of patients, the profession and society at large.
- D. Recognition that good medical practice depends on a mutual understanding and relationship between the doctor, the patient and the family with respect for patient's welfare, cultural diversity, beliefs and autonomy.
- E. An ability to apply the principles of moral reasoning and decision-making to conflicts within and between ethical, legal and professional issues including those raised by economic constraints, commercialization of health care, and scientific advances.
- F. Self-regulation and a recognition of the need for continuous self-improvement with an awareness of personal limitations including limitations of one's medical knowledge.
- G. Respect for colleagues and other health care professionals and the ability to foster a positive collaborative relationship with them.
- H. Recognition of the moral obligation to provide end of life care, including palliation of symptoms.
- I. Recognition of ethical and medical issues in patient documentation, plagiarism, confidentiality and ownership of intellectual property.
- J. Ability to effectively plan and efficiently manage one's own time and activities to cope with uncertainty, and the ability to adapt to change.
- K. Personal responsibility for the care of individual patients.

II. Scientific Foundation of Medicine

- A. The normal structure and function of the body as a complex of adaptive biological system.
- B. Abnormalities in body structure and function which occur in diseases.
- C. The normal and abnormal human behavior.
- D. Important determinants and risk factors of health and illnesses and of interaction between man and his physical and social environment.
- E. Molecular, cellular, biochemical and physiological mechanisms that maintain the body's homeostasis.
- F. The human life cycle and effects of growth, development and aging upon the individual, family and community.

- G. The etiology and natural history of acute illnesses and chronic diseases.
- H. Epidemiology, health economics and health management.
- I. The principles of drug action and its use, and efficacy of various therapies.
- J. Relevant biochemical, pharmacological, surgical, psychological, social and other interventions in acute and chronic illness, in rehabilitation, and end-of-life care.

III. Communication Skills

- A. Listen attentively to elicit and synthesize relevant information about all problems and understanding of their content.
- B. Apply communication skills to facilitate understanding with patients and their families and to enable them to undertake decisions as equal partners.
- C. Communicate effectively with colleagues, faculty, the community, other sectors and the media.
- D. Interact with other professionals involved in patient care through effective teamwork.
- E. Demonstrate basic skills and positive attitudes towards teaching others.
- F. Demonstrate sensitivity to cultural and personal factors that improve interactions with patients and the community.
- G. Communicate effectively both orally and in writing.
- H. Create and maintain good medical records.
- I. Synthesize and present information appropriate to the needs of the audience, and discuss achievable and acceptable plans of action that address issues of priority to the individual and community.

IV. Clinical Skills

- A. Take an appropriate history including social issues such as occupational health.
- B. Perform a physical and mental status examination.
- C. Apply basic diagnostic and technical procedures, to analyze and interpret findings, and to define the nature of a problem.
- D. Perform appropriate diagnostic and therapeutic strategies with the focus on life-saving procedures and applying principles of best evidence medicine.
- E. Exercise clinical judgment to establish diagnoses and therapies.
- F. Recognize immediate life threatening conditions.
- G. Manage the common medical emergencies.
- H. Manage patients in an effective, efficient and ethical manner including health promotion and disease prevention.
- I. Evaluate health problems and advise patients taking into account physical, psychological, social and cultural factors.
- J. Understand the appropriate utilization of human resources, diagnostic interventions, therapeutic modalities and health care facilities.

V. Population Health and Health System

- A. Knowledge of important life - style, genetic, demographic, environmental, social, economic, psychological, and cultural determinants of health and illness of a population as a whole.
- B. Knowledge of their role and ability to take appropriate action in disease, injury and

accident prevention and protecting, maintaining and promoting the health of individuals, families and community.

- C. Knowledge of international health status, of global trends in morbidity and mortality of chronic diseases of social significance, the impact of migration, trade, and environmental factors on health and the role of international health organizations.
- D. Acceptance of the roles and responsibilities of other health and health related personnel in providing health care to individuals, populations and communities.
- E. Understanding of the need for collective responsibility for health promoting interventions which requires partnerships with the population served, and a multidisciplinary approach including the health care professions as well as intersectoral collaboration.
- F. Understanding of the basics of health systems including policies, organization, financing, cost-containment measures of rising health care costs, and principles of effective management of health care delivery.
- G. Understanding of the mechanisms that determine equity in access to health care, effectiveness, and quality of care.
- H. Use of national, regional and local surveillance data as well as demography and epidemiology in health decisions.
- I. Willingness to accept leadership when needed and as appropriate in health issues.

VI. Management of Information

- A. Search, collect, organize and interpret health and biomedical information from different databases and sources.
- B. Retrieve patient-specific information from a clinical data system.
- C. Use information and communication technology to assist in diagnostic, therapeutic and preventive measures, and for surveillance and monitoring health status.
- D. Understand the application and limitations of information technology.
- E. Maintain records of his/her practice for analysis and improvement.

VII. Clinical Thinking and Research

- A. Demonstrate a critical approach, constructive skepticism, creativity and a research-oriented attitude in professional activities.
- B. Understand the power and limitations of the scientific thinking based on information obtained from different sources, in establishing the causation, treatment and prevention of disease.
- C. Use personal judgments for analytical and critical problem solving and seek out information rather than to wait for it to be given.
- D. Identify, formulate and solve patients' problems using scientific thinking and based on obtained and correlated information from different sources.
- E. Understand the roles of complexity, uncertainty and probability in decisions in medical practice.
- F. Formulate hypotheses, collect and critically evaluate data, for the solution of problems.