

LEWIS KATZ SCHOOL OF MEDICINE AT TEMPLE UNIVERSITY GRADUATION COMPETENCIES

INTRODUCTION

The Lewis Katz School of Medicine at Temple University (LKSOM) is dedicated to educating and training students to be excellent physicians who will be thoroughly prepared to meet the medical needs of a diverse patient population, including the local community, the State of Pennsylvania and beyond. The school places particular emphasis on attracting and graduating future physicians who will provide care to underserved and diverse populations. This tradition has been preserved and passed on by a faculty which is dedicated to the medical needs of North Philadelphia and surrounding communities.

LKSOM is dedicated to enrolling students who exemplify academic excellence, and embody the passion, commitment and integrity to meet the highest standards in patient care and medical scholarship. Temple students represent the diversity of society; they are recent college graduates and those changing careers, and they come from a wide variety of cultural, socioeconomic, and geographic backgrounds. They also have demonstrated capacity for volunteerism, altruism, and a genuine desire to help those in need. A LKSOM education provides a solid foundation in the fundamentals of basic science and clinical medicine. The curriculum is structured to ensure that students acquire the knowledge, clinical and life-long learning skills, and professional attributes essential to the practice of medicine. The program is marked by an extensive "hands-on" experience in caring for patients. Thus, graduates are exceptionally well prepared to pursue further training. Additionally, students have opportunities to engage in service learning, basic and clinical research and discover if their aptitudes and interests lie in these areas.

The medical school competencies are based on recommendations of the Accreditation Council on Graduate Medical Education (ACGME), which formally established the use of educational outcomes as a tool for accrediting residency training programs, The Physician Competency Reference Set and the Core Entrustable Professional Activities for Entering Residency. LKSOM has chosen to use the following defined areas of competency: medical knowledge, patient care, interpersonal and communication skills, professionalism, practice-based learning and improvement, systems-based practice, and interprofessional collaboration. The learning objectives for medical students, which may be found on the School of Medicine's web site, are listed below under the appropriate type of competency.

KNOWLEDGE-BASED COMPETENCIES

Physicians must be knowledgeable about the scientific basis of medicine and be able to apply that knowledge to clinical problem-solving and the care of patients. They must engage in self-directed and independent learning to remain current in their knowledge.

Students must demonstrate:

1. Knowledge of the normal anatomical structure and function (physiological and psychological) of the human body as a whole and of each of its major organ systems, throughout the life cycle, to include developmental (infancy and adolescence) and aging processes
2. Knowledge of the molecular, biochemical, and cellular mechanisms important in maintaining the body's homeostasis
3. Knowledge of the various causes (genetic, developmental, metabolic, toxic, microbiologic, immunologic, neoplastic, degenerative, psychologic, and traumatic) of disease and the ways in which disease affects homeostasis (pathogenesis)
4. Knowledge of the altered structure and function (pathology and pathophysiology) of the body and its major organ systems that occur in clinically and pathophysiologically important diseases and conditions
5. Knowledge of the basic mechanisms of pharmacologic and non-pharmacologic modalities employed in the prevention and treatment of disease and amelioration of pain and suffering
6. Knowledge of the economic, psychological, occupational, social, and cultural factors affecting health and illness
7. Knowledge of the epidemiology of common illnesses and the systematic approaches useful in reducing the incidence and prevalence of those illnesses
8. Knowledge of disease and injury prevention practices in the care of individual patients and their families, and the community
9. Knowledge of the various types of family planning and their potential impact on the patient, the family and society
10. Knowledge of the physical and psychological aspects of aging and dying and a commitment to support and appropriately counsel patients and their families
11. The ability to describe the principles and application of evidence-based medicine in establishing the causation of disease and therapeutic efficacy of treatment
12. The ability to recognize how factors such as age, gender, ethnicity, sexual orientation, functional limitations, languages, belief systems, and socioeconomic

status impact health, perceptions of well-being and medical care of culturally diverse and medically underserved populations

13. Knowledge of the forms and value of complementary medicine as employed in the treatment of disease
14. The ability to recognize the impact of chronic disease and disability on a patient's ability to function in society
15. Knowledge of the basic principles and ethics of clinical and translational research, and how such research is conducted, evaluated and applied to the care of patients.

PATIENT CARE COMPETENCIES

Students must be able to provide patient-centered care that is evidence-based, compassionate, effective and appropriate for the treatment of health problems and the promotion of health. Students must be able to:

1. Provide health care services aimed at maintaining health and well-being, and treating patients with acute and chronic conditions
2. Obtain an accurate, comprehensive medical history that respects individual differences, as it relates to the patient's health status
3. Communicate clearly; verbally, in writing, and electronically with patients, patients' families, and colleagues
4. Conduct a thorough and accurate physical and psychiatric evaluation in patients of all ages
5. Perform routine technical procedures
6. Interpret and integrate clinical data, including laboratory, radiology, and pathology studies
7. Reason deductively in solving clinical problems
8. Construct appropriate management strategies (both diagnostic and therapeutic) for patients with common acute and chronic conditions; including medical, psychiatric, and surgical conditions, those requiring short- and long-term rehabilitation, and those with serious conditions requiring critical care.
9. Appropriately relieve pain and ameliorate the suffering of patients

10. Incorporate the findings of emerging clinical and translational research into clinical decision-making and problem-solving, and be able to explain how the findings apply to patient care

INTERPERSONAL AND COMMUNICATION SKILLS

Students must demonstrate interpersonal and communication skills that result in effective exchange of information and collaboration with patients, their families and health professionals. Students must demonstrate:

1. The ability to interact and communicate respectfully, effectively and empathetically with patients, their families, and the public; across all ages, socioeconomic and cultural backgrounds
2. The ability to address sensitive health care issues in an effective, compassionate and non-judgmental manner, including screening for alcohol and substance abuse, domestic violence, sexual behavior and delivering bad news
3. The ability to communicate scientific and medical knowledge to help educate patients about their health, and health care decisions and ensure adequate understanding
4. The ability to communicate accurate patient information verbally, in writing or electronically to colleagues and healthcare workers

PROFESSIONALISM

Professionalism embodies the responsibilities of a physician that go beyond knowledge and technical skills and enables the delivery of health care. It includes honesty, maintaining patient confidentiality and trust, mutual respect and commitment to the welfare of patients. Students must:

1. Demonstrate personal motivation, compassion, reliability, integrity, and honesty in all interactions with patients, families, colleagues and other healthcare professionals
2. Demonstrate responsiveness to patient needs that supersedes self-interest
3. Demonstrate understanding of, and commitment to, ethical and legal principles in all aspects of patient care, including beneficence, justice, confidentiality, privacy, informed consent and patient autonomy

4. Demonstrate awareness of, and sensitivity to, diversity among patients, providing effective care that respects interpersonal differences in age, ethnicity, cultural beliefs, socioeconomic status, sexual orientation and spirituality
5. Serve as a healthcare advocate for individual patients and all patient populations
6. Recognize their abilities and limitations, participate in ongoing self-assessment, actively seeking and responding to feedback, and continuously striving to improve patient care and patient-centered interactions
7. Demonstrate attentiveness to professional and medical errors and work to reduce such errors in all aspects of patient care
8. Maintain a professional image in behavior and attire, demonstrating respect for the patient and the environment in which the patient care is given
9. Engage in self-directed and independent learning to stay abreast of the scientific advances, relevant to the current practice of medicine and emerging technologies

PRACTICE-BASED LEARNING AND IMPROVEMENT

Students must be able to place their role as patient care provider within the greater context of the healthcare system. Students must commit to lifelong learning and professional improvement which includes honest and thoughtful self-evaluation and analysis of practice patterns and outcomes within the framework of standards of care, and best-practices as defined by scientific evidence. Students must demonstrate:

1. Awareness of strengths, deficiencies and limits in knowledge and skills
2. Ability to set goals and pursue opportunities to acquire new knowledge that can be applied to patient care
3. The skills to improve patient care by thoughtful analysis of their own patient population and pertinent characteristics of the communities from which their patients derive
4. The ability to identify and apply epidemiologic, statistical and scientific evidence towards the effectiveness and practicality of diagnostic and therapeutic modalities with the goal of improved quality of patient care

5. The appropriate roles of technology and information management in as it pertains to both education and patient care
6. The ability to give and receive constructive nonjudgmental feedback from/to all sources, designed to enhance patient care and the function of the team
7. Use of knowledge and communication skills to facilitate the education of patients, families, trainees, peers and other health care professionals

SYSTEMS-BASED PRACTICE

Students must demonstrate knowledge of the multiple systems engaged in the provision of health care and the ability to use system resources to provide optimal patient care.

Students must:

1. Demonstrate awareness of how their patient care and other professional activities affect other health care professionals, the health care organizations in which they work, and to society, at large, and how these elements affect their own practice
2. Demonstrate knowledge of, and respect for, the roles of other healthcare professionals, and the ways in which they may collaborate in the care of both individuals and communities
3. Describe the major organizational models of healthcare delivery, including the ways in which such models are important in controlling health care costs and allocating resources
4. Practice cost effective health care and resources while maintaining a high quality of patient care
5. Identify and use resources and ancillary health care services for all patients, including patients facing barriers to access to health care
6. Demonstrate an awareness of the complexities of medical practice with regard to ethical and legal issues

INTERPROFESSIONAL COLLABORATION

Students must demonstrate the ability to engage in an interprofessional team to enhance safe and effective patient care. Students must:

1. Work with other health professionals to maintain a climate of mutual respect, dignity, diversity, ethical integrity and trust

2. Use the knowledge of their own role, and understanding of the roles of other health professionals to address the healthcare needs of the patients and populations served.
3. Communicate effectively with other health professionals in a responsive and responsible manner

Approved by the Curriculum Committee and the Dean, May 2015