

The Icahn School of Medicine at Mount Sinai Student Competencies

Competency 1: Patient Care

- History taking
- Physical examination
- Procedural skills
- Clinical reasoning
- Medical decision making
- Communication skills

Competency 2: Scientific and Medical Knowledge

- Organ structure and function
- Characteristics and mechanisms of disease
- Healing and therapeutics
- Social and cultural determinants of health and disease
- Health care resources and delivery systems
- Ethical principles of medical practice and research

Competency 3: Learning, Scholarship, and Collaboration

- Self-awareness and commitment to self-improvement
- Methods of investigation, analysis, and dissemination
- Teamwork

Competency 4: Professionalism and Advocacy

- Service
- Leadership and accountability
- Honesty and integrity
- Empathy
- Respect

Competency 1: Patient Care

Graduates will reliably obtain and interpret clinical data, propose a prioritized management plan, and communicate effectively with patients, families, colleagues, and staff.

History taking

- Establish a safe and comfortable environment to allow for a patient to provide a confidential history.
- Conduct an interview that is appropriate to the patient's age and the clinical venue.

- Conduct a comprehensive interview that is organized and efficient and includes the appropriate elements of the history.
- Incorporate additional sources of information, including the medical record and perspectives of caregivers.

Physical examination

- Establish a safe and comfortable environment for the physical examination, respecting the patient's privacy and dignity and counseling the patient about what to expect during the exam.
- Conduct an exam that is appropriate to the patient's chronological and developmental age and the clinical venue.
- Conduct a comprehensive physical exam that is organized, efficient and technically correct, focusing on organ systems related to the chief complaint.

Procedural skills

- Describe indications for and potential complications of basic procedures.
- Demonstrate correct techniques for basic procedures with attention to universal precautions, sterile technique and patient comfort.
- Describe indications for and potential complications of commonly performed advanced procedures.

Clinical reasoning

- Integrate and interpret data from the medical history, patient records, physical exam, and diagnostic procedures to generate a prioritized patient problem list and differential diagnosis.
- Formulate plausible explanations for clinical phenomena using probabilistic deduction and application of basic science principles, epidemiology, and biostatistics.
- Recognize patients who require emergent assessment and management.
- Recognize when screening for disease is appropriate.

Medical decision making

- Initiate diagnostic and management plans with attention to medical evidence, acuity of illness, risk-benefit estimations, patient and/or family preferences, consideration of cost, and availability of therapies.
- Recognize when consultation is required.
- Plan for safe transitions across the care continuum, with attention to health literacy, patient safety, and support systems.
- Apply the principles of evidence-based medicine to critique and utilize scientific literature and in clinical decision making.

Communication skills

- Communicate information honestly, accurately, reliably, empathically, and in a culturally sensitive manner with patients and their families and/or caregivers.
- Elicit and respond to patient values, preferences and expectations for health and health care.
- Communicate effectively with members of the inter-professional health care team.
- Listen actively to patients, their families and/or caregivers, and all members of the health care team.
- Effectively educate and counsel patients about plans of care, health promotion and disease prevention, chronic disease management and end-of-life care.
- Record clinical information and reasoning in the medical record clearly, reliably and accurately.

Competency 2: Scientific and Medical Knowledge

Graduates will apply knowledge and analytic abilities to engage in problem solving at multiple levels, from the individual patient to the health care system.

Organ structure and function

- Apply the principles of anatomy, histology, and physiology to describe the interrelated functions of organs and organ systems.
- Apply the principles of molecular and cellular biology to describe the basis of tissue specificity.
- Apply knowledge of major biochemical pathways to describe normal cell function and metabolism.
- Describe the changes that occur to organs and organ systems in development and aging.

Characteristics and mechanisms of disease

- Explain mechanisms of disease using the principles of molecular biology and genetics.
- Describe the structural changes and physiologic alterations that underlie disease states.
- Explain how microorganisms interact with the host at cellular, tissue, and systems levels to promote homeostasis or cause disease.
- Describe the incidence of, prevalence of, and risk factors for major diseases.
- Recognize and interpret the clinical manifestations of major diseases.
- Develop prognoses based on the natural history of disease and patient presentation.
- Explain how genomics is used to predict disease vulnerability and inform management.

Healing and therapeutics

- Describe the role of the immune system in preventing and responding to disease.
- Recognize reparative responses to cell and tissue injury.
- Apply the principles of pharmacokinetics and pharmacodynamics to describe the mechanisms of action, clinical utility, adverse effects and interactions of major therapeutic agents.
- Select and apply basic pharmacologic and non-pharmacologic approaches to disease and symptom management.

Social and cultural determinants of health and disease

- Recognize the impact of age, culture, environment, disability, ethnicity/race, gender, sexuality, socioeconomic status, and spirituality on health, disease, treatment, and prevention.
- Describe the concept of human rights and its impact on health, disease, treatment, and prevention.

Health care resources and delivery systems

- Describe the global distribution of disease and its impact on the health care needs of communities.
- Identify available models of and barriers to organizing, financing and delivering health care to patients and communities.
- Describe the U.S. health care system and contrast it with other health care systems
- Describe a systems approach to address health care resource needs.
- Describe emergency preparedness as related to health care needs.

Ethical principles of medical practice and research

- Recognize ethical dilemmas in the practice of medicine, health care systems and research.
- Recognize the effects of laws and policies on medical practice and health care systems.
- Apply the principles of autonomy, beneficence, non-maleficence, and justice to clinical scenarios and to issues of resource allocation.

Competency 3: Learning, Scholarship, and Collaboration

Graduates will be inquisitive and reflective learners and practitioners who will think creatively and work effectively and collaboratively with others.

Self-awareness and commitment to self-improvement

- Identify and critically reflect upon personal strengths, limitations, and biases.
- Recognize when and how to seek assistance and mentorship.
- Actively solicit and incorporate feedback into practice.
- Actively seek out self-directed learning opportunities.
- Identify resources to support one's own physical and emotional health.
- Recognize one's evolving role in patient care, teaching, and inquiry.

Methods of investigation, analysis, and dissemination

- Utilize information resources to facilitate learning and to inform patient care.
- Formulate questions and generate hypotheses that will drive learning, investigation, discovery, and innovation.
- Engage in and present scholarly activity relevant to health and disease.

Teamwork

- Engage actively in group learning and peer and colleague teaching.
- Recognize the role and expertise of inter-professional health care team members.
- Work effectively as part of an inter-professional patient care team.

Competency 4: Professionalism and Advocacy

Graduates will use their knowledge and skills responsibly to serve the needs of patients and society.

Service

- Demonstrate a concern for the vulnerabilities of patients.
- Advocate for individual and community access to health care and resources that promote health.
- Show concern for the basic needs and life circumstances of patients.
- Demonstrate commitment to the health care needs of communities.

Leadership and Accountability

- Assume responsibility for one's own actions.
- Identify strategies for effective conflict resolution, negotiation, and decision-making.
- Consistently follow up with learning tasks and patient care.
- Adhere to institutional and professional standards of medical practice.
- Recognize and report actual and potential medical errors.
- Demonstrate a commitment to quality improvement and patient safety.

Honesty and Integrity

- Be honest and ethical in clinical interactions, educational activities, scholarly work, and service activities.
- Accurately represent one's role and capabilities.
- Recognize potential conflicts of interest.

Empathy

- Demonstrate compassion for the experiences and conditions of patients.
- Respond to the emotional needs of patients and their caregivers.

Respect

- Acknowledge and protect the dignity of patients.
- Act in a non-judgmental manner toward patients and caregivers.
- Ensure the privacy of health information.
- Conduct oneself in a manner appropriate to the setting and activity.