

**LOYOLA UNIVERSITY CHICAGO STRITCH SCHOOL OF MEDICINE
COMPETENCY OUTCOMES 2009-2010**

PREAMBLE

The Stritch School of Medicine is part of Loyola University Chicago, an urban Catholic university that is composed of a culturally and religiously diverse faculty, student body, and administration. We believe that our graduates benefit and grow from that diversity within a community united by shared passion for learning and healing.

The Stritch School of Medicine specifically calls upon the Jesuit tradition of education, which emphasizes the full development of its students, rigorous concern for the quality of its academic programs, and promotion of a broad educational curriculum that encourages leadership in the service of others and advances social justice. Our graduates are encouraged to be leaders in bringing improved healthcare to all members of society, especially its most disadvantaged.

Stritch School of Medicine graduates are expected to conduct their professional lives acknowledging the intrinsic dignity and worth of all human beings. This attitude is developed within a university medical center community that views patients as people to be healed and not diseases to be cured. To do so, graduates are expected to be knowledgeable, skillful, dutiful, and altruistic.

COMPETENCY OUTCOMES

The Stritch School of Medicine requires its medical students to develop competencies in six areas to the level expected of new physicians entering graduate medical education programs. Students will be broadly trained and prepared to undertake advanced training and choose careers in academic medicine, community medicine, and/or research. Faculty members are committed as teachers, mentors, and role models to support the development of these student competencies.

MEDICAL KNOWLEDGE

- 1. Know, understand, and apply the basic concepts of the basic and clinically supportive sciences**
 - a. Normal structure and function of the body and each of its major organ systems
 - b. Mechanisms important to maintaining the body's homeostasis, including molecular, biochemical, and cellular mechanisms
 - c. Pathogenesis of disease, including altered structure and function, with an emphasis on the genetics and molecular basis of disease
 - d. Human life span, including in-utero development, developmental changes and milestones, psychological development, and the differences between normal variation and disease
 - e. Principles of genetics, including basic principles, role of genetics, basic principles of gene therapy and genetic counseling
 - f. Principles of epidemiology
 - g. Principles of health maintenance and disease prevention

INTERPERSONAL AND COMMUNICATION SKILLS

- 1. Use effective listening skills and elicit information using effective nonverbal, explanatory, and questioning skills**
- 2. Use verbal language effectively**
- 3. Use written language effectively**
- 4. Work effectively with others as a member of the team in a variety of settings**
 - a. Outline roles and goals of various health professional team members
 - b. Be aware of strategies for resolving conflicts and communicating effectively with team members
- 5. Use information technology to manage information, access online medical information, and communicate with healthcare team members**

6. **Facilitate the learning of other students and healthcare professionals**
 - a. Know and employ principles of teaching and learning relevant to the variety of roles and responsibilities of the physician
 - b. Use appropriate techniques for collaborating and teaching in small groups
 - c. Use appropriate techniques for providing effective feedback
7. **Communicate essential (clinical) information effectively with the team and in consultation**
8. **Deal effectively with difficult situations**
 - a. Respectfully and effectively communicate issues of patient care with non-physician healthcare workers, including clergy
 - b. Deal with angry patients and families

PROFESSIONALISM, MORAL REASONING, AND ETHICAL JUDGEMENT

1. **Behave professionally**
 - a. Be responsible, reliable, and dependable
 - b. Identify the major obligations of physicians to their patients and show that the foundation of the medical profession is a skilled and devoted service to people who come for care for a variety of reasons
 - c. Demonstrate personal integrity, honesty, and self-discipline in all course and clerkship activities and in interactions with patients, peers, faculty, residents, and non-physician staff; and identify these interactions as analogs of future professional relationships, thereby maintaining the same high standards expected in patient care and consistent with the Statement on Academic Integrity for SSOM Students (from the ad hoc committee Report on Professionalism)
 - d. Project a professional image in manner, dress, grooming, and speech in all interpersonal relationships that is consistent with the medical profession's accepted contemporary standards in the community
 - e. Actively work to begin to bring about just healthcare reform by taking leadership and educational roles to advocate for the common good
 - f. Demonstrate commitment to service to patients in need
 - g. Examine the role of spirituality and personal values in their practice of medicine
 - h. Demonstrate the ability to exercise sound judgment and function under pressure
2. **Interact effectively with the patient**
 - a. Endeavor to understand the patient's perspective regarding his/her illness
 - b. Respect the patient's rights and privacy
 - c. Recognize the salient legal, ethical, spiritual, and psychosocial issues that might affect the management of a patient's illness and modify management as appropriate; for example, informed consent, truth-telling, and malpractice
3. **Interact effectively with the entire team in the care of the patient and in the educational setting**
 - a. Endeavor to understand the patient's perspective regarding his/her illness
 - b. Respect the patient's rights and privacy
 - c. Recognize the salient legal, ethical, spiritual, and psychological issues that might affect the management of a patient's illness and modify management as appropriate; for example, informed consent, truth-telling, and malpractice
4. **Understand basic ethical concepts and apply them in moral reasoning in the educational and healthcare context**
 - a. Identify conflicting ethical considerations in a particular ethical choice in the care of an individual patient
 - b. Systematically analyze and defend ethical choices in the treatment of an individual patient
 - c. Determine, articulate, and analyze the ethical issues in health policy
 - d. Determine, articulate, and analyze the ethical issues in relations with other healthcare professionals
 - e. Demonstrate and employ skills necessary to implement ethical choices in medical practice to include the following:
 - 1) Be able to employ effective communication skills
 - 2) Know when other persons, expertise, or resources are needed in resolution of ethical choices
 - 3) Know how to obtain this additional help

- f. Effectively integrate the above skills in the care of patients, including:
 - 1) Ability to obtain a valid consent or refusal of treatment
 - 2) Ability to evaluate person's competence to accept or refuse treatment and how to proceed if the patient is incompetent

5. Recognize and effectively deal with unethical behavior of other members of the healthcare team

- a. Identify and effectively use the resources available for dealing with unethical behavior
- b. Identify and appropriately manage potential conflicts of interest that physicians face as caregivers and researchers
- c. Understand and follow institutional policies and procedures that guide the actions to be taken in the event unethical behavior is identified

CLINICAL SKILLS AND PATIENT CARE

1. Gather and record essential and accurate information about patients

- a. Elicit and record
 - 1) Complete history
 - 2) Focused histories
 - 3) Patient's fears and concerns
 - 4) Impact of an illness and its treatment on the patient and the patient's family
 - 5) Non-biologic factors, including family, culture, age, gender, disabilities, and religious beliefs
- b. Perform and record
 - 1) Complete screening physical examination
 - 2) Organ-specific focused examinations
 - i. HEENT
 - ii. Cardiovascular
 - iii. Pulmonary
 - iv. Abdominal
 - v. Pelvis
 - vi. Breast
 - vii. Neurological, including mental status
 - viii. Musculoskeletal
 - ix. Urologic

2. Create a database synthesizing pertinent facts from the history, physical, and laboratory data

- a. Logically and legibly write:
 - 1) Hospital admitting notes and orders
 - 2) Daily progress notes
 - 3) Discharge summaries
 - 4) Focused outpatient follow-up notes

3. Integrate pertinent data to develop a relevant problem list, including organic, psychological, and social issues

4. Generate an initial, prioritized differential diagnosis

5. Develop outpatient management plans

- a. Construct appropriate management strategies (diagnostic, therapeutic, and educational) for common conditions, both acute and chronic
- b. Develop care plans for patients with chronic conditions not amenable to immediate care, including rehabilitative services, care of chronically disabled persons, and patients facing the end of life
- c. Recognize and institute appropriate initial therapies for emergency and life-threatening situations
- d. Understand the principles of relieving pain and ameliorating suffering of the patient
- e. Develop diagnostic and treatment strategies that are cost-effective and sensitive to limited resources

6. Communicate essential clinical information effectively with the team and in consultation

- a. Logically, systematically, and concisely present clinical data, specifically: history, physical, laboratory data, differential diagnosis, and plan

7. **Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment (evidence-based medicine)**
8. **Counsel and educate patients and their families**
 - a. Explain to patients and families findings from clinical investigations, including plans for follow up, possible courses of therapy with indications, risks, benefits, and alternatives
 - b. Obtain an informed consent or refusal
 - c. Use appropriate skills and strategies for communicating during difficult situations, such as giving bad news and dealing with angry patients and families
9. **Use information technology to support patient care decisions and patient education**
 - a. Perform database retrievals, retrieve patient-specific information, select and use information technology, and employ electronic communications for the direct care of patients
10. **Perform competently all medical and invasive procedures considered essential for entering any area of graduate medical education**
 - a. Perform routine, basic clinical procedures, including:
 - 1) Venipuncture
 - 2) Basic life support
 - 3) Intravenous catheter insertion
 - 4) Arterial puncture
 - 5) Lumbar puncture
 - 6) Nasogastric tube insertion
 - 7) Foley catheter insertion
 - 8) Suture lacerations
 - b. Interpret the results of the common clinical tests used most frequently:
 - 1) Electrocardiograms
 - 2) Laboratory tests
 - 3) Radiological tests
11. **Provide healthcare services aimed at preventing health problems or maintaining health**
 - a. Demonstrate knowledge and be able to apply the principles of health maintenance and disease prevention, including:
 - 1) Screening for diseases
 - 2) Estimating and communicating risks
 - 3) Immunizations
12. **Work collaboratively with healthcare professionals, including those from other disciplines, to provide patient-focused care**

LIFELONG LEARNING, PROBLEM SOLVING, AND PERSONAL GROWTH

1. **Demonstrate an investigatory and analytic thinking approach to clinical situations**
 - a. Pursue resources necessary to understand and solve diagnostic and therapeutic problems
 - b. Demonstrate ability to use multiple sources of information
 - c. Demonstrate openness to adopting new methods of acquiring information
2. **Apply acquired knowledge effectively**
 - a. Compile, correctly present, and properly reference information
 - b. Demonstrate new skills to faculty and/or colleagues
 - c. Stay current with and adapt to changes in the academic and professional environment
3. **Demonstrate a commitment to individual professional and personal growth**
 - a. Develop a portfolio
 - b. Routinely perform valid, reliable, and critical self-assessment of medical knowledge
 - c. Recognize personal limitations in knowledge and experience and need for immediate help/consultation
 - d. Faithfully attend recommended conferences, classes, seminars, lectures, and other structured learning opportunities
 - e. Accept performance feedback gracefully and modify personal behavior in response to correction
 - f. Appropriately confer with and seek advice or assistance from supervisors, advisors, or consultants

4. **Analyze practice experience and perform practice-based improvement activities using a systematic methodology**
 - a. Understand the problem of variations in physician behavior for common conditions, importance of developing evidence-based practice pathways to manage common problems, and need to individualize recommendations for the patient
 - b. Formulate questions regarding outcomes seen in patient care and consider simple methods of quality improvement, including improved patient satisfaction, decreased complication rates, improved clinical outcomes, and improved access to healthcare for patients from underserved groups
 - c. Identify errors in medicine and reasons for errors
 - d. Develop basic strategies to reduce medical errors
5. **Locate, appraise, critically review, and assimilate evidence from scientific studies and medical literature related to the patient's health problems**
 - a. Discern relevancy of literature
 - b. Evaluate the reliability, validity, accuracy, cost-effectiveness, and timeliness of the information or research reported by a resource
 - c. Compensate for any perceived inadequacies in knowledge and skills through further study
6. **Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness**
 - a. Analyze and evaluate any research report used with regard to subject population (population bias), research methods employed, statistical methods used, and conclusions drawn
7. **Use information technology learning resources to manage information, access online medical information, and support self-education**
8. **Demonstrate leadership and motivation**
 - a. Coordinate the management of the patient's problem
 - b. Mentor junior members of the team

SOCIAL AND COMMUNITY CONTEXT OF HEALTHCARE

1. **Appreciate the importance of the many non-biologic factors that influence health, disease, disability, and access to care**
 - a. Demonstrate understanding of how the patient's family, culture, age, gender, disabilities, and religious beliefs can influence healthcare decisions and outcomes
 - b. Avoid stereotypical language; for example racist, sexist, homophobic, and so forth
 - c. Recognize the barriers to healthcare that non-biologic (socio-economic) factors impose.
 - d. Demonstrate knowledge of non-biological determinants of child abuse and domestic violence and the economic, psychological, social, and cultural factors that impact their development and continuation
 - e. Demonstrate an understanding that some individuals in our society are at risk for inadequate healthcare, including the poor, uninsured, underinsured, children, unborn, single parents, elderly, racial minorities, immigrants, refugees, physically disabled, mentally disabled, chemically dependent, and those with incurable diseases
2. **Know how types of medical practice and delivery systems differ from one another, including methods of controlling healthcare costs and allocating resources**
 - a. Demonstrate knowledge of the American healthcare system, including reimbursement mechanisms, the roles of government and private sector, and the ways patients pay for healthcare
3. **Practice cost-effective healthcare and resource allocation that does not compromise quality of care**
4. **Advocate for quality patient care and assist patients in accessing care and in dealing with the system complexities**
 - a. Implement strategies to access health services for patients who need advocacy and assistance
 - b. Recognize and attempt to reduce socio-cultural barriers to healthcare, including problems of accessibility, acceptability, and availability
 - c. Seek information relevant to local and national healthcare delivery and discuss the issues in a manner appropriate for an informed professional student

5. **Know how to partner with healthcare managers and healthcare providers to assess, coordinate, and improve healthcare, and how these activities can promote health, prevent disease, and manage illness**
 - a. Demonstrate knowledge of the role of and services provided by community resources
 - b. Arrange referrals to community resources for patients and their families
 - c. Work cooperatively with social/human service providers, value their input, and incorporate appropriate input into the treatment plan