

Educational Goals and Objectives of the MD Degree Program

Saint Louis University School of Medicine

Domain I: Knowledge¹

GOAL I.A. Upon completion of the MD Program, a SLUSOM student will have a fund of knowledge of those basic sciences which are recognized as fundamental to the practice of scientific medicine which is sufficiently large to ensure that the student can practice scientific medicine.

Objective I.A.1. A student will be able to recall, recognize, and describe the normal structure and function of the human body as a whole, and to recall, recognize, and describe the structure and function of the major organ systems and how they support homeostasis.

Objective I.A.2. A student will be able to recall, recognize and describe the structure of cells and the cellular and molecular mechanisms, which support homeostasis.

Objective I.A.3. A student will be able to recall, recognize and describe the many causes of disease (including genetic, developmental, metabolic, toxic, auto-immune, microbiologic, neoplastic, degenerative and traumatic), and recall, recognize and describe their roles and mechanisms (when known to science) in the development of altered structure and function of common and/or important diseases.

Objective I.A.4. A student will be able to recall, recognize, and describe how behavioral, psychosocial, cultural, economic, environmental, and occupational factors can alter disease expression and/or influence the choice of treatment and/or the response to treatment.

Objective I.A.5. A student will be able to recall, recognize, and describe the pharmacological properties and side effects of drugs used to treat common and/or important human diseases and syndromes and their mechanisms of action (when known to science).

GOAL I.B. Upon completion of the MD Program, a SLUSOM student will have a fund of knowledge of clinical medicine, which is sufficiently large to ensure that the student can practice medicine safely, competently, and effectively, in a post-graduate training program.

Objective I.B.1. A student will be able to recall, recognize and describe the clinical manifestations, method of diagnosis, differential diagnosis, and treatment of common and/or important diseases and syndromes which are encountered in the practice of family medicine, internal medicine, neurology, obstetrics and gynecology, pediatrics, psychiatry, and surgery.

¹ Goals and Objectives approved February 2001; Revisions approved by the Curriculum Management Committee, February 21, 2007.

Domain I: Knowledge¹

GOAL I.C. Upon completion of the MD Program, a SLUSOM student will have a knowledge of epidemiological principles, which is sufficiently large to allow the student to understand the role of epidemiology in addressing public health problems.

Objective I.C.1. A student will be able to identify major health care needs of society, and state means to address them.

Objective I.C.2. A student will be able to identify major health care needs of the community in which he or she practices and to access community resources to address these needs, especially health disparities.

Objective I.C.3. A student will be able to identify cultural and ethnic differences in their patients and communities that may influence medical management.

Objective I.C.4. A student will be able to recognize disparities in healthcare and their influence on a patient's health and well-being.

GOAL I.D. Upon completion of the MD Program, a SLUSOM student will have a knowledge of the scientific method which is sufficiently large to allow the student to critically review reports of new knowledge in his or her chosen field, and thus, to assimilate new knowledge into his or her practice of medicine intelligently.

Objective I.D.1. A student will be able to review critically, with regard to potential author bias, study design and methods, subject population and study results, a published report of an original clinical investigation of each of the following types: a report on a therapy for a disease, a report on a diagnostic test for a disease, a report on the prognosis of a disease, and a report on a possible cause and effect relationship of a disease.

Objective I.D.2. A student will demonstrate knowledge of, and be able to apply evidence-based principles in their care of patients.

Domain II: Skills

GOAL II.A. Upon completion of the MD Program, a SLUSOM student will be skilled at obtaining the information necessary for the construction of a clinical database.

Objective II.A.1. A student will be able to create a comprehensive clinical database by virtue of the ability to do the following:

- a. Interview a patient or patient's surrogate, using appropriate interpersonal skills, demonstrating cultural competence, and maintaining professional demeanor, to obtain a comprehensive medical history which includes chief complaint, history of present illness, past medical history, family history, social and cultural history, and review of systems.
- b. Utilize sources of information in addition to the patient interview to augment the comprehensive medical history. Such sources could include medical records, verbal reports from other health care professionals, and information from family or friends of the patient.
- c. Perform a systematic and technically correct physical examination of a patient,

Domain II: Skills

adult or child, using appropriate interpersonal skills and professional demeanor, which accurately identifies any abnormal findings and unusual normal variants.

Objective II.A.2. A student will be able to create a focused clinical database by virtue of the ability to perform a focused medical interview and focused physical examination of an acutely ill patient by means of judicious selection of those portions of a comprehensive medical interview and physical examination which are essential to the formulation of a differential diagnosis which includes the most common and/or most urgent diagnoses which could explain the patient's illness.

GOAL II.B. Upon completion of the MD Program, a SLUSOM student will be skilled at deductive reasoning in diagnostic problem solving.

Objective II.B.1. A student will be able to establish diagnoses by virtue of the ability to do the following:

- a. Generate a list of initial diagnostic hypotheses (differential diagnosis) from the clinical database, which takes account of the key points of the medical history and physical examination.
- b. Select diagnostic tests that can be used to refute or confirm the initial diagnostic hypotheses, and which are acceptable to the patient in terms of cost, comfort and safety.
- c. Interpret correctly the results of a diagnostic test by formulating a post-test predictive value (positive or negative) that incorporates the pre-test probability of the presence of the disease and the test's reported sensitivity and specificity.

GOAL II.C. Upon completion of the MD Program, a SLUSOM student will be skilled at constructing effective treatment strategies.

Objective II.C.1. A student will be able to formulate a treatment plan for the patient by virtue of the ability to do the following:

- a. Utilize a medical library and/or database resources to obtain up-to-date information regarding treatment options that might be suitable for the patient.
- b. Evaluate critically the quality of the scientific evidence supporting the use of the possible treatment options as per objective II.H.1.b.
- c. Identify clinical parameters to be used in assessing the patient's response to treatment.
- d. Communicate effectively in a culturally competent manner with the patient, or surrogate, as per objective II.F.1.a.
- e. Achieve consensus with the patient, or patient's surrogate, on the treatment plan selected.

Domain II: Skills

GOAL II.D. Upon completion of the MD Program, a SLUSOM student will be skilled at providing emergency care to the patient with a life-threatening condition.

Objective II.D.1. A student will be able to care for the patient with a life threatening condition by virtue of the ability to do the following:

- a. Recognize when a patient has a life-threatening condition.
- b. Initiate correct emergency treatment that is designed to optimize the patient's chance for survival and to minimize morbidity.

GOAL II.E. Upon completion of the MD Program, a SLUSOM student will be skilled at promoting patient health maintenance and well being.

Objective II.E.1. A student will be able to promote patient health maintenance and well being by virtue of the ability to do the following:

- a. Identify patients whose risk of developing a disease (whether the risk is due to genetic, occupational, biological, cultural, environmental, or lifestyle factors), can be reduced by specific, scientifically proven, primary prevention strategies.
- b. Communicate effectively with the patient as per objective II.F.1.b.

GOAL II.F. Upon completion of the MD Program, a SLUSOM student will be skilled at communicating with patients, colleagues, and other health care professionals.

Objective II.F.1. A student will be able to communicate effectively with patients, colleagues, and other health care professionals by virtue of the ability to do the following:

- a. Explain to an ill or injured patient, or patient's surrogate, in a manner that the patient or surrogate can understand, (utilizing a patient's explanatory model of illness, expectations about diagnosis and treatment, and values and preferences about treatment in a culturally competent fashion), the student's assessment of the nature of the patient's illness, the purpose of any diagnostic testing, what the patient can expect to experience during the diagnostic testing, treatment options available, and treatment recommendations.
- b. Explain to a patient who has a modifiable risk factor for the development of a disease, in a manner the patient can understand, the importance of reducing his or her risk of developing the disease and how this can be done, and then, select a strategy which is acceptable to the patient.
- c. Write and/or enter (electronically) each of the following types of notes which document patient care: Hospital Admission Note, Hospital Progress Note, Hospital Discharge Note, Outpatient Visit Note and Consultation Note.
- d. Give an oral presentation of a patient's medical findings that is organized in a standardized format, understandable, and concise.
- e. Demonstrate their ability to function effectively in a health care team, showing respect for the knowledge, skills, and needs of other healthcare professionals.

Domain II: Skills

GOAL II.G. Upon completion of the MD Program, a SLUSOM student will be skilled at the performance of routine technical procedures.

Objective II.G.1. A student will be able to perform the following procedures utilizing sterile technique and, when appropriate, Universal Precautions: basic cardiopulmonary life support (CPR), venipuncture, arterial blood removal, peripheral intravenous line insertion, nasogastric tube insertion, urinary bladder catheterization, closure of simple lacerations with sutures, and removal of sutures.

GOAL II.H. Upon completion of the MD Program, a SLUSOM student will be skilled at acquiring knowledge.

Objective II.H.1. A student will be able to acquire new knowledge in the field of his or her choice, by virtue of the ability to do the following:

- a. Search an appropriate database for the most current literature on the subject at hand.
- b. Review critically, with regard to potential author bias, study design and methods, subject population and study results, a published report of an original clinical investigation of each of the following types: a report on a therapy for a disease, a report on a diagnostic test for a disease, a report on the prognosis of a disease, and a report on a possible cause and effect relationship of a disease.

Domain III: Professional Attitudes

GOAL III.A. Upon completion of the MD Program, a SLUSOM student will have knowledge of those ethical principles which govern proper clinical decision making and practice, as well as recognition of the threat to these principles that are posed by various methods of financing and organizing the provision of health care.

Objective III.A.1. A student will be able to describe how ethical principles guide clinical decision making in a variety of clinical situations, including decision making challenges which can arise at the beginning and end of a patient's life, as well as explain how conflicts of interest inherent to various methods of financing and organizing the provision of health care can pose threats to medical professionalism.

GOAL III.B. Upon completion of the MD Program, a SLUSOM student will at all times behave towards patients in a manner consistent with the ideals of the profession.

Objective III.B.1. A student will consistently, in the care of his or her patients, do all of the following: (Consistency will be evidenced as an absence of any reports from supervising physicians stating that the student has failed to adhere to any part of this objective, even if the report involves only one instance.)

- a. Respect the patient's rights, including the right to privacy.
- b. Respect the patient's dignity.
- c. Recognize his or her own personal biases in health care delivery.
- d. Advocate the interests of the patient, even over his or her own interests.

Domain III: Professional Attitudes

- e. Treat the patient compassionately, in the manner in which he or she would want to be treated, if the roles were reversed.
- f. Act with integrity and speak honestly.

GOAL III.C. Upon completion of the MD Program, a SLUSOM student will understand the important roles which other health care professionals play in the care of patients and will interact with these professionals in a manner which fosters collaboration in patient care.

Objective III.C.1. A student will consistently respect the dignity of all other health care professionals. (Consistency will be evidenced as per Objective III.A.1)

GOAL III.D. Upon completion of the MD Program, a SLUSOM student will be aware of the limitations of his or her medical knowledge and clinical skills and will have developed a habit of continuous learning.

Objective III.D.1. A student will consistently seek advice and guidance from supervising physicians and/or specialist physicians, whenever the student recognizes that his or her own knowledge base and/or clinical skills are insufficient to care for the patient without such guidance. (Consistency will be evidenced as an absence of reports from supervising physicians that the student has failed to recognize his or her own limitations, or has failed to act on this recognition, even if the report involves only one instance.)

Objective III.D.2. A student will consistently expand his or her knowledge base by means of reading, as well as by other appropriate methods of learning, and will consistently practice those clinical skills, which are appropriate to the student's current clinical assignment. (Consistency will be evidenced as an absence of any reports from supervising physicians or non-physician faculty members that the student has failed to expand his or her knowledge and/or has failed to practice appropriate clinical skills during any course or clerkship.)