

Rutgers New Jersey Medical School Goals and Objectives Updated 2-21-24

GOAL 1: Mastery and Integration of Clinical, Basic and Health Systems Sciences

Objective 1: To demonstrate comprehension of core basic science knowledge

At the end of Phase 1, students should be able to:

- 1.1 a) Demonstrate knowledge of the basic principles of biochemistry, human genetics, human anatomy and physiology, at the organ and system level.
- 1.1 b) Describe the molecular, biochemical, and cellular mechanisms for homeostasis.
- 1.1 c) Demonstrate mastery of both basic and advanced principles of host defense mechanisms, pathology, pathophysiology, and pharmacology at the organ and system level.
- 1.1 d) Demonstrate an understanding of patterns of disease in populations and be able to apply these principles to disease prevention and amelioration, at both the individual and the community level.
- 1.1 e) Define the current concepts and methods in clinical and public health nutrition.
- 1.1 f) Demonstrate knowledge of the use of quantitative data and techniques in reading and interpreting the medical literature.
- 1.1 g) Describe the impact of aging on normal physiology, immune function and disease processes.

At the end of Phase 2, students should also be able to:

- 1.1 h) Demonstrate an ability to integrate cellular and molecular events, and anatomical and physiological conditions that manifest in disease.

Objective 2: To demonstrate comprehension of core clinical knowledge

At the end of Phase, students should be able to:

- 1.2 a) Describe the normal structure and function of the body and its organ systems.
- 1.2 b) Demonstrate knowledge of normal and abnormal human behavior and common psychiatric diseases.
- 1.2 c) List the various causes (genetic, developmental, metabolic, toxic, environmental, microbiologic, autoimmune, neoplastic, degenerative, traumatic, and functional) of diseases and the ways that they affect the body (pathogenesis).
- 1.2 d) Describe the pathology and pathophysiology of the major organ systems of the body as seen in various diseases and conditions.

At the end of Phase 2, students should also be able to:

- 1.2 e) Apply an understanding of the underlying pathophysiologic basis for disease to clinical medicine.
- 1.2 f) Describe the basis for current treatments of disease and the effects on the relevant systems in the body.

At the end of Phase 3, students should also be able to:

- 1.2 g) Integrate knowledge obtained in the first three years to function successfully as a competent acting intern.
- 1.2 h) Integrate subspecialty knowledge with knowledge obtained in the first three years.

Rutgers New Jersey Medical School Goals and Objectives Updated 2-21-24

Objective 3: To demonstrate an ability to utilize basic science knowledge to explain normal and abnormal physical findings

At the end of Phase 1, students should be able to:

- 1.3 a) Demonstrate an understanding of the basic science principles of the organ systems to normal physical findings.
- 1.3 b) Apply an understanding of the principles of host defense mechanisms, pathology, pathophysiology, and pharmacology to abnormal physical findings.

At the end of Phase 2, students should also be able to:

- 1.3 c) Describe the pathophysiological basis for patient specific findings.
- 1.3 d) Demonstrate knowledge of biochemistry, microbiology, immunology, and genetics in understanding and interpreting laboratory test results.

At the end of Phase 3, students should also be able to:

- 1.3 e) Apply evidence provided by clinical research to develop comprehensive treatment plans.
- 1.3 f) Apply evidence provided by basic science research in the diagnosis, treatment and management of disease.

Objective 4: To demonstrate an awareness of and responsiveness to the larger context and system of health care

At the end of Phase 2, students should be able to:

- 1.4 a) Demonstrate an understanding of various types of health care systems, their role and their impact on health care delivery and patient outcomes.
- 1.4 b) Perform effectively as a member of the healthcare team and call on interprofessional resources (case workers, nurses, physical therapists, etc.) to provide optimal and comprehensive patient care.
- 1.4 c) Recognize the importance of patient safety and participate in identifying system errors and quality improvement efforts with potential systems solutions.

At the end of Phase 3, students should be able to:

- 1.4 d) Demonstrate an understanding of the principles of value-based care, including how health policy, quality and cost impact health care outcomes
- 1.4 e) Recognize the importance of Clinical Informatics, security of patient data and utilization of data to improve health.

Rutgers New Jersey Medical School Goals and Objectives Updated 2-21-24

GOAL 2: Excellence in Clinical Skills

Objective #1: To perform a comprehensive history and physical including obtaining a complex biopsychosocial history

At the end of Phase 1, students should be able to:

- 2.1 a) Perform a comprehensive history (including psychosocial, sexual, functional, etc.) based on a single presenting symptom.
- 2.1 b) Perform a comprehensive physical and mental status examination and be able to identify common abnormal physical findings

At the end of the Phase 2, students should also be able to:

- 2.1 c) Perform a comprehensive history on a patient with multiple presenting symptoms in each of the required clinical disciplines.
- 2.1 d) Perform a comprehensive physical and mental status examination and be able to identify discipline-specific abnormal physical findings in each of the required clinical clerkships.
- 2.1 e) Demonstrate a systematic method for focusing history and physical examinations.

At the end of the Phase 3, students should also be able to:

- 2.1 f) Perform a comprehensive history on undifferentiated patients with complex biopsychosocial and sexual problems.
- 2.1 g) Perform a comprehensive physical and mental status examination on undifferentiated patients with abnormal physical findings.

Objective 2: To formulate differential diagnoses and therapeutic plans

At the end of Phase 1, students should be able to:

- 2.2 a) Identify the patient's main presenting problem.
- 2.2 b) Develop a problem list based on the history and physical.
- 2.2 c) Demonstrate a systematic approach to the differential diagnosis.
- 2.2 d) Describe patient, physician and system barriers to successfully negotiating treatment plans and patient adherence, including physician contribution, and what strategies may be used to overcome these barriers.
- 2.2 e) Develop a basic therapeutic plan for a single presenting diagnosis.

At the end of Phase 2, students should also be able to:

- 2.2 f) Generate and pursue multiple hypotheses in the interview and physical examination, linking the development of clinical reasoning with pathophysiology.
- 2.2 g) Develop a complete therapeutic plan on a patient with multiple presenting problems.

At the end of Phase 3, students should also be able to:

- 2.2 h) Develop a thorough but concise problem list based on history and physical.
- 2.2 i) Describe what is meant by an undifferentiated patient complaint.
- 2.2 j) Develop a complete therapeutic plan on a patient with complex biopsychosocial problems including potential therapeutic options.

Objective 3: To present a patient in a comprehensive, logical analytical fashion

Rutgers New Jersey Medical School Goals and Objectives Updated 2-21-24

At the end of Phase 1, students should be able to:

- 2.3 a) Present a complete history and physical based on a single presenting symptom in an organized manner using basic medical terminology.

At the end of Phase 2, students should also be able to:

- 2.3 b) Present a thorough history and physical based on multiple presenting problems in a concise and organized manner including pertinent positives and negatives using medical terminology.

At the end of Phase 3, students should also be able to:

- 2.3 c) Present a thorough history and physical based on multiple presenting problems in a confident, concise, and organized manner including pertinent positives and negatives using medical terminology.

Objective 4: To demonstrate ability to counsel patients

At the end of Phase 1, students should be able to:

- 2.4 a) Educate patients in basic health promotion and disease prevention.
- 2.4 b) Demonstrate how to work with different cultural groups to increase adherence to health-care regimens.
- 2.4 c) Educate patients about their disease management process for common illnesses, such as hypertension, asthma, and diabetes mellitus.

At the end of Phase 2, students should also be able to:

- 2.4 d) Explain disease processes to patients.
- 2.4 e) Convey the management plan to patients.
- 2.4 f) Educate the patient on how to adhere to recommended management plan.

At the end of Phase 3, students should be able to:

- 2.4 g) Demonstrate methods of achieving consensus for the management plan: confirming common understanding by summarizing and checking, educating patients, tailoring regimen to meet patient's individual circumstances, cueing, patient self-monitoring, contingency contracting, patient empowerment, patient self-efficacy.

Objective 5: To demonstrate competency in basic clinical procedures

At the end of Phase 1, students should be able to perform:

- 2.5 a) Blood Pressure and vital sign measurements

At the end of Phase 2, students should also be able to perform:

- 2.5 b) Intradermal injections
- 2.5 c) Subcutaneous injections
- 2.5 d) Intramuscular injections
- 2.5 e) Basic life support
- 2.5 f) Venipuncture
- 2.5 g) Intravenous insertion

At the end of Phase 3, students should also be able to perform:

Rutgers New Jersey Medical School Goals and Objectives Updated 2-21-24

- 2.5h) Pelvic exam
- 2.5i) An arterial puncture
- 2.5j) Suturing simple lacerations
- 2.5k) Foley catheter insertion (Male and/or Female)

GOAL 3: Excellence in Professionalism and Humanism

Objective 1: Demonstrate kindness, compassion, and respect for the patient, the patient's family and loved ones, and all members of the health care team.

During all phases, students should be able to:

- 3.1a) Relate respectfully with patients, families, peers, colleagues, and members of the interprofessional healthcare team with diverse backgrounds and roles.
- 3.1c) Illustrate interpersonal and communication skills that incorporate kindness and compassion.
- 3.1b) Demonstrate empathy and establish rapport with patients and their families and loved ones.

Objective 2: Model ethical and professional conduct in all aspects of student life and clinical care

During all Phases, students should be able to:

- 3.2a) Adhere to the NJMS Code of Professional Conduct.
- 3.2b) Demonstrate active participation in the learning experience.
- 3.2c) Reflect critically on their own performance and develop a plan for self-improvement.
- 3.2d) Demonstrate and value confidentiality for patients, families, peers, faculty, staff, and healthcare professionals.

At the end of Phase 2, students should also be able to:

- 3.2e) Document and present information with integrity, truthfulness and accuracy.
- 3.2f) Demonstrate a commitment to ethical principles in the delivery of health care.

Objective 3: Recognize and learn from mistakes.

During all phases, students should be able to:

- 3.3a) Demonstrate responsibility for errors and generate a plan with an openness to change.
- 3.3b) Describe methods by which medical errors can be minimized and strategies for disclosure of medical errors.
- 3.3c) Interrogate the systems that lead to medical errors to improve healthcare quality and patient safety
- 3.3d) Identify and address lapses in professionalism in themselves and others.

Rutgers New Jersey Medical School Goals and Objectives Updated 2-21-24

Objective 4: Integrate humanism as essential to the practice of medicine

During all phases, students should be able to:

3.4a) Explore humanism through critical self-reflection.

3.4b) Demonstrate respect for a patient's humanity through clinical excellence, kindness, and compassion.

3.4c) Identify communication skills critical to building trust in patient relationships.

GOAL 4: Commitment to the Health of the Community and Appreciation of Social and Cultural Diversity

Objective 1: Incorporate the patient's values, perspective, and social context into clinical care.

At the end of Phase 1, students should be able to:

4.1a) Effectively elicit a medical history that explores the patient's perspective, social context, and understanding of illness acknowledging patients' diverse identities and experiences

4.1b) Demonstrate value and respect for the patient's beliefs while performing the physical exam.

At the end of Phase 2, students should be able to:

4.1c) Partner with the patient to develop an assessment and treatment plan that incorporates the patient's priorities and values

Objective 2: Demonstrate cultural humility through the recognition and mitigation of bias.

At the end of Phase 1, students should be able to:

4.2a) Recognize, through the development of self-awareness, how to appropriately mitigate gender, sexual orientation, race/ethnicity, religious, socioeconomic status, disability, and cultural biases in themselves.

At the end of Phase 2, students should be able to:

4.2b) Recognize and appropriately address biases in patients, peers, other healthcare professionals, and in healthcare delivery.

4.2c) Interpret the impact of provider bias on the physician-patient relationship and on health outcomes.

4.2d) Identify ways to mitigate provider bias in the physician-patient interaction and the healthcare system.

Objective 3: Demonstrate social responsibility and a commitment to service learning.

At the end of Phase 1, students should be able to:

4.3a) Explain the impact of social drivers of health and health inequities on healthcare access and health outcomes.

4.3b) Demonstrate commitment to service for addressing social drivers of health and improving the health of patients and communities.

4.3c) Engage in asset-based community service learning through active participation and critical reflection

Rutgers New Jersey Medical School Goals and Objectives Updated 2-21-24

At the end of Phase 2, students should be able to:

4.3d) Formulate strategies to overcome healthcare access and quality issues at the individual and community levels.

Objective 4: Identify and address the health effects of structural racism.

At the end of Phase 1, students should be able to:

4.4a) Recognize the relationship between structural racism, implicit bias, microaggressions, and health outcomes

At the end of Phase 2, students should be able to:

4.4b) Incorporate the effects of structural racism on the health status and health care of patients in their assessment and plan.

4.4c) Identify the role of physician advocacy in addressing structural racism.

At the end of Phase 3, students should be able to:

4.4d) Formulate potential solutions to reshape health systems to address structural racism

Rutgers New Jersey Medical School Goal and Objectives

GOAL 5: Dedication to Lifelong Learning and Personal Wellness

Objective 1: To practice evidence-based medicine

At the end of Phase 1, students should be able to:

- 5.1a) Demonstrate facility in using electronic databases and literature retrieval services.
- 5.1b) Apply knowledge of study designs and statistical methods to appraise information about diagnostic tests and therapeutic interventions.
- 5.1c) Identify information pertinent to the care of patients.

At the end of Phase 2, students should also be able to:

- 5.1d) Identify, appraise, and assimilate evidence from clinical guidelines, systematic reviews, and articles related to patients' problems.
- 5.1e) Demonstrate the use of web sites, on-line search engines, PDA-based programs, information services, and journals to locate information related to patients' health needs.
- 5.1f) Demonstrate clinical problem-solving skills using information resources.
- 5.1g) Demonstrate skills in hypothesis-building and deductive problem solving.
- 5.1h) Demonstrate the ability to appraise suitability of the information for clinical questions.

At the end of Phase 3, students should also be able to:

- 5.1i) Critically assess the medical literature.
- 5.1j) Demonstrate the ability to assimilate the new information into care for health problems.
- 5.1k) Utilize evidence-based medicine methodology to address patient care issues.

Objective 2: To recognize when to seek consultation

At the end of Phase 1, students should be able to:

- 5.2a) Identify the major disciplines in medicine.
- 5.2b) Identify the major diseases in each of the disciplines of medicine.

At the end of Phase 2, students should be able to:

- 5.2c) Discuss the situations in which a consultant should be called.

At the end of Phase 3, students should be able to:

- 5.2d) Integrate the input from consultations into a coherent diagnostic and treatment plan for their patients during the acting internship.

Objective 3: To demonstrate ability to learn from patients and all members of the health care team

At the end of Phase 1, students should be able to:

- 5.3a) Perform effectively in small group settings and laboratories.
- 5.3b) Define the roles of social workers, physician assistants, nurses, physical therapists, etc. in the care of patients.

At the end of Phase 2, students should also be able to:

- 5.3c) Describe the advantages of an inter-professional approach to patientcare.
- 5.3d) Demonstrate recognition of the patient's role as an integral member of the health care team.

Rutgers New Jersey Medical School Goal and Objectives

At the end of Phase 3, students should also be able to:

- 5.3 e) Demonstrate an ability to work effectively with all members of the healthcare team during their acting internship.

Objective 4: To develop an understanding of one's own strengths, weaknesses, biases and fears

At the end of Phase 1, students should be able to:

- 5.4 a) Identify their optimal learning style.
- 5.4 b) Identify methods which enable them to learn most effectively in a variety of educational modalities-lecture, small group, laboratory.
- 5.4 c) Identify gaps in their knowledge of the basic sciences.
- 5.4 d) Identify weaknesses in their ability to perform a simple history and physical.

At the end of Phase 2, students should also be able to:

- 5.4 e) Identify areas of weakness in their ability to perform a complex history and physical.
- 5.4 f) Identify areas of weakness in their communication skills.
- 5.4 g) Identify areas of weakness in their clinical knowledge.
- 5.4 h) Acknowledge one's own errors and reflect critically on one's own performance.

Objective 5: To develop the skills to attain self-awareness and maintain personal wellness.

At the end of Phase 2, students should be able to:

- 5.5 a) Develop self-care practices to maintain personal wellness in their physical, emotional, spiritual, intellectual and social spheres.
- 5.5 b) Develop stress management and personal resilience strategies.
- 5.5 c) Identify personal maladaptive behaviors including substance abuse and psychological issues; identify appropriate resources and networks for support and seek care as needed.
- 5.5 d) Recognize the importance of advocating for themselves and others.
- 5.5 e) Identify resources to establish and maintain financial wellbeing.

At the end of Phase 3, students should also be able to:

- 5.5 f) Utilize resources to enhance personal wellness to promote and maintain a sustainable work-life balance that will allow for optimal patient care.

GOAL 6: Development of Effective Skills in Education and Communication

Objective 1: To teach patients how to maximize wellness, prevent disease and manage illness

During Phase 1, students should be able to:

- 6.1 a) Demonstrate greeting the patient appropriately.
- 6.1 b) Demonstrate a respectful attitude.
- 6.1 c) Demonstrate caring and respectful behaviors when interacting with patients and their families.
- 6.1 d) Elicit the patient's view of health problem(s).
- 6.1 e) Respond on appropriate level to patient concerns and expectations.
- 6.1 f) Discuss how the health problem(s) affect the patient's life.

Rutgers New Jersey Medical School Goal and Objectives

At the end of Phase 2, students should also be able to:

- 6.1 g) Communicate medical information to a patient appropriate to the patient's ability to understand.
- 6.1 h) Recognize the importance of the patient-physician relationship as the cornerstone of medical care.
- 6.1 i) Elicit patient requests, concerns, and expectation from a range of patients diverse in age, gender, and socio-cultural background.
- 6.1 j) Demonstrate validation of the patient's feelings.

At the end of Phase 3, students should also be able to:

- 6.1 k) Counsel patients regarding disease processes, management plans and preventive care.
- 6.1 l) Formulate a common understanding with the patient on an elementary description of diagnosis, prognosis, and treatment plan.
- 6.1 m) Support the patient's self-efficacy, such as acknowledging and reinforcing positive patient behavior.

Objective 2: To effectively teach junior students and peers

At the end of Phase 1, students should be able to:

- 6.2 a) Participate actively in small group discussions.
- 6.2 b) Discuss the principles of adult learning theory.
- 6.2 c) Discuss the principles of effective small group teaching.
- 6.2 d) Discuss laboratory findings in lab and small group exercises.
- 6.2 e) prepare and deliver effective presentations.

At the end of Phase 2, students should also be able to:

- 6.2 f) Educate other members of the health care team on patient's disease processes.

At the end of Phase 3, students should also be able to:

- 6.2 g) Serve as a facilitator in case-based small group discussions.
- 6.2 h) Teach history-taking and physical examination skills to junior students.

Objective 3: To deliver organized and concise oral presentations

At the end of Phase 1, students should be able to:

- 6.3 a) Discuss clear, well-thought out answers in problem-solving recitation sessions.
- 6.3 b) Critically evaluate an article from the current literature.
- 6.3 c) Describe a comprehensive history and physical exam in a clear and concise manner in both written and oral format.

At the end of Phase 2, students should be able to:

- 6.3 d) Present a patient at rounds.

At the end of Phase 3, students should also be able to:

- 6.3 e) Communicate medical information orally to other members of the health care team (e.g. nurses, social workers, case managers, home health facilitators).
- 6.3 f) Research a topic and provide the best evidence for management of a clinical problem.

Rutgers New Jersey Medical School Goal and Objectives

Objective 4: To demonstrate effective listening skills

At the end of Phase 1, students should be able to:

- 6.4 a) Elicit a structured medical history.
- 6.4 b) Elicit a comprehensive history.
- 6.4 c) Demonstrate eye contact at comfortable intervals throughout interview.

At the end of Phase 2, students should also be able to:

- 6.4 d) Use appropriate facilitation skills, encouraging the patient to continue speaking.

At the end of Phase 3, students should also be able to:

- 6.4 e) Use silence and non-verbal facilitation to encourage the patient's expression of thought and feelings.

Objective 5: To communicate with others in a non-judgmental manner

At the end of Phase 1, students should be able to:

- 6.5 a) Participate actively in small group sessions, engaging in appropriate discourse on controversial issues with others with differing opinions.
- 6.5 b) Demonstrate sensitivity to gender, racial and cultural diversity.
- 6.5 c) Describe strategies for establishing positive patient-doctor relationships.
- 6.5 d) Conduct a sexual history in a non-judgmental manner, with empathy, and without shame or embarrassment.
- 6.5 e) Recognize physician barriers to obtaining a sexual history and the consequences that might result from such an omission.

At the end of Phase 2, students should also be able to:

- 6.5 f) Understand that physicians and patients bring attitudes, emotions, beliefs, and culture to encounters that may have significant impact upon patient-doctor interactions and outcomes.

At the end of Phase 3, students should also be able to:

- 6.5 g) Describe patient, physician, and system barriers to effective communication.

Objective 6: To write articulate, legible and interpretable histories, physicals and progress notes.

At the end of Phase 1, students should be able to:

- 6.6 a) Accurately and legibly document information obtained from a structured medical history.
- 6.6 b) Accurately and legibly document information obtained from a complete medical history and physical exam.

At the end of Phase 2, students should also be able to:

- 6.6 c) Communicate medical information in written format to other members of the health care team (e.g. nurses, social workers, case managers, home health facilitators).
- 6.6 d) Document daily information accurately and concisely in the medical chart in the form of a problem-oriented progress note.

At the end of Phase 3, students should also be able to:

- 6.6 e) Demonstrate the ability to write medical orders, when permitted.

Rutgers New Jersey Medical School Goal and Objectives

- 6.6 f) Demonstrate the ability to dictate discharge summaries and/or basic operative reports and procedures, when permitted “done in a mock format”.
- 6.6 g) Demonstrate ability to use electronic medical records and order-writing technology, when permitted.
- 6.6h) Demonstrate ability to write prescriptions.