

STUDENT LEARNING OUTCOMES FOR SIX YEAR B.A.-M.D. PROGRAM

Years 1-2

Communication and Interpersonal Skills

- Communicate effectively with patients and families across a broad range of socioeconomic and cultural backgrounds
- Communicate effectively with colleagues within one's profession or specialty and other health professionals
- Work effectively with others as a member of study groups and docent team
- Use written communication effectively in required course assignments, including using appropriate medical terminology
- Describe skills required for having difficult conversations with patients and families
- Describe basic emotion handling techniques to manage interpersonal interactions

Interprofessional Collaboration

- Treat other health professionals with respect

Medical Knowledge

- Demonstrate an investigatory and analytic approach to learning basic and clinical sciences
- Apply basic concepts of biomedical sciences to explain aspects of selected patient problems
- Describe basic concepts of clinical sciences pertaining to selected patient problems
- Apply basic concepts of social-behavioral sciences to explain aspects of simple, straightforward patient problems
- Explain the principles of the scientific method

Practice-based Learning and Improvement

- Identify strengths, deficiencies, and limits in one's knowledge and expertise
- Set learning and improvement goals
- Identify and perform lifelong learning activities that address one's gaps in knowledge, skills, and/or attitudes
- Incorporate feedback into daily practice
- Conduct productive literature searches for required assignments
- Participate in the education of peers

Patient Care

- Demonstrate basic history-taking and physical exam skills (for example, elicits an HPI or social history, obtains vital signs)
- Explain the basic science involved in selected laboratory techniques
- Identify general approaches to preventing health problems or maintaining health
- Describe patient safety principles and risks to patient safety
- Identify the most likely diagnosis based on a real or simulated patient's history

Personal and Professional Development

- Develop the ability to use self-awareness of knowledge, skills, and emotional limitations to engage in appropriate help-seeking behaviors
- Demonstrate healthy coping mechanisms to respond to stress
- Manage conflict between personal and professional responsibilities
- Practice flexibility and maturity in adjusting to change with the capacity to alter one's behavior
- Practice teamwork skills that enhance team functioning and the learning environment
- Demonstrate self-confidence in interacting with others

Professionalism

- Demonstrate compassion, integrity, and respect for others
- Demonstrate respect for patient privacy and autonomy
- Demonstrate accountability to patients, society, and the profession, including during coursework
- Demonstrate sensitivity and responsiveness to diversity, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation

- Describe principles of bioethics
- Demonstrate responsiveness to patient needs that supersedes self-interest while maintaining own well-being

Systems-based Practice

- Work effectively in various health care delivery settings
- Describe the roles of various health care personnel in patient care

Years 3-4

Communication and Interpersonal Skills

- Communicate effectively with patients and families across a broad range of socioeconomic and cultural backgrounds
- Communicate effectively with colleagues within one's profession or specialty and other health professionals
- Work effectively with others as a member of a health care team or other professional group (eg. docent team)
- Use written language effectively in medical records and required course assignments
- Demonstrate, during simulated patient encounters, sensitivity, honesty, and compassion in difficult conversations, including those about death, end of life, adverse events, bad news, disclosure of errors, and/or other sensitive topics
- Demonstrate basic emotion handling techniques that allow one to develop and manage interpersonal interactions
- Describe the types of information necessary to convey during a consultation

Interprofessional Collaboration

- Work with other health professionals to establish and maintain a climate of mutual respect, dignity, diversity, ethical integrity, and trust
- Use the knowledge of one's own role and the roles of other health professionals in helping to care for patients
- Communicate with other health professionals in a responsive and responsible manner in helping to care for patients

Medical Knowledge

- Demonstrate an investigatory and analytic approach to learning basic and clinical sciences
- Apply established concepts of biomedical sciences to health care for patients
- Apply established concepts of clinical sciences to health care for patients
- Apply established concepts of social-behavioral sciences to health care for patients
- Contribute to the creation, dissemination, application, or translation of new health care knowledge and practices
- Apply established concepts of biostatistics and epidemiological sciences to health care for patients

Practice-based Learning and Improvement

- Identify strengths, deficiencies, and limits in one's knowledge and expertise
- Set learning and improvement goals
- Identify and perform lifelong learning activities that address one's gaps in knowledge, skills, and/or attitudes
- Incorporate feedback into daily practice
- Locate and appraise evidence from scientific studies related to patients' health problems
- Participate in the education of patients, families, and peers
- Identify and analyze new knowledge, guidelines, standards, technologies, products, or services that have been demonstrated to improve outcomes when prompted

Patient Care

- Gather information about patients and their conditions through history-taking, physical examination, and the use of laboratory data, imaging, and other tests
- Interpret basic laboratory data, imaging studies, and other tests appropriate for early clerkships
- Recommend appropriate preventive care and health maintenance strategies for patients and families
- Perform basic responsibilities in order to provide care that is safe and effective
- Interpret history and physical examination data, and results of basic diagnostic studies from patients with common, straightforward problems to create a differential diagnosis
- Provide basic counselling and education for patients with common, straightforward problems and their families
- Describe and/or perform the basic medical and diagnostic procedures appropriate for early clerkships
- Develop management plans for patients with common, straightforward problems
- Describe appropriate referral of patients including ensuring continuity of care throughout transitions between providers or settings, and following up on patient progress and outcomes

Personal and Professional Development

- Develop the ability to use self-awareness of knowledge, skills, and emotional limitations to engage in appropriate help-seeking behaviors
- Demonstrate healthy coping mechanisms to respond to stress
- Manage conflict between personal and professional responsibilities
- Practice flexibility and maturity in adjusting to change with the capacity to alter one's behavior
- Practice teamwork skills that enhance team functioning and the learning environment
- Demonstrate self-confidence that puts patients, families, and members of the health care team at ease

Professionalism

- Demonstrate compassion, integrity, and respect for others
- Demonstrate respect for patient privacy and autonomy
- Demonstrate accountability to patients, society, and the profession, including during coursework
- Demonstrate sensitivity and responsiveness to diversity, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation
- Describe ethical principles pertaining to provision or withholding of care, confidentiality, and informed consent, including compliance with relevant laws, policies, and regulations
- Demonstrate responsiveness to patient needs that supersedes self-interest while maintaining own well-being

Systems-based Practice

- Work effectively in various health care delivery settings and systems relevant to one's clinical specialty
- Coordinate with members of the health care team, such as PharmD's, clinical medical librarians, social workers, interpreters, and nurses, for assistance in the comprehensive care of patients and their families
- Suggest cost-effective options in helping to care for patients
- Assist patients and their families to deal with system complexities
- Utilize resources in the community that may provide assistance to patients
- Describe principles of quality improvement

Years 5-6

Communication and Interpersonal Skills

- Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds
- Communicate effectively with colleagues within one's profession or specialty, other health professionals, and health related agencies
- Work effectively with others as a member or leader of a health care team or other professional group
- Maintain comprehensive, timely, and legible medical records
- Demonstrate sensitivity, honesty, and compassion in difficult conversations, including those about death, end of life, adverse events, bad news, disclosure of errors, and/or other sensitive topics
- Demonstrate insight and understanding about emotions and human responses to emotions that allow one to develop and manage interpersonal interactions
- Act in a consultative role to other health professionals

Interprofessional Collaboration

- Work with other health professionals to establish and maintain a climate of mutual respect, dignity, diversity, ethical integrity, and trust
- Use the knowledge of one's own role and the roles of other health professionals to appropriately assess and address the health care needs of the patients and populations served
- Communicate with other health professionals in a responsive and responsible manner that supports the maintenance of health and the treatment of disease in individual patients and populations

Medical Knowledge

- Demonstrate an investigatory and analytic approach to clinical situations
- Apply established and emerging bio-physical scientific principles fundamental to health care for patients and populations
- Apply established and emerging principles of clinical sciences to diagnostic and therapeutic decision-making, clinical problem-solving, and other aspects of evidence-based health care
- Apply principles of social-behavioral sciences to provision of patient care, including assessment of the impact of psychosocial and cultural influences on health, disease, care seeking, care compliance, and barriers to and attitudes toward care
- Contribute to the creation, dissemination, application, or translation of new health care knowledge and practices

- Apply principles of epidemiological sciences to the identification of health problems, risk factors, treatment strategies, resources, and disease prevention/health promotion efforts for patients and populations

Practice-based Learning and Improvement

- Identify strengths, deficiencies, and limits in one's knowledge and expertise
- Set learning and improvement goals
- Identify and perform lifelong learning activities that address one's gaps in knowledge, skills, and/or attitudes
- Incorporate feedback into daily practice
- Locate, appraise, and assimilate evidence from scientific studies related to patients' health problems
- Participate in the education of patients, families, students, trainees, peers, and other health professionals
- Continually identify, analyze, and implement new knowledge, guidelines, standards, technologies, products, or services that have been demonstrated to improve outcomes

Patient Care

- Gather essential and accurate information about patients and their conditions through history-taking, physical examination, and the use of laboratory data, imaging, and other tests
- Interpret laboratory data, imaging studies, and other tests required for the area of practice
- Provide health care services to patients, families, and communities aimed at preventing health problems or maintaining health
- Organize and prioritize responsibilities to provide care that is safe, effective, and efficient
- Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
- Counsel and educate patients and their families to empower them to participate in their care and enable shared decision-making
- Perform all medical, diagnostic, and surgical procedures considered essential for the area of practice
- Develop and carry out patient management plans
- Provide appropriate referral of patients including ensuring continuity of care throughout transitions between providers or settings, and following up on patient progress and outcomes
- Perform supervisory responsibilities commensurate with one's roles, abilities, and qualifications

Personal and Professional Development

- Develop the ability to use self-awareness of knowledge, skills, and emotional limitations to engage in appropriate help-seeking behaviors
- Demonstrate healthy coping mechanisms to respond to stress
- Manage conflict between personal and professional responsibilities
- Practice flexibility and maturity in adjusting to change with the capacity to alter one's behavior
- Provide leadership skills that enhance team functioning, the learning environment, and/or the health care delivery system
- Demonstrate self-confidence that puts patients, families, and members of the health care team at ease

Professionalism

- Demonstrate compassion, integrity, and respect for others
- Demonstrate respect for patient privacy and autonomy
- Demonstrate accountability to patients, society, and the profession
- Demonstrate sensitivity and responsiveness to diversity, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation
- Demonstrate a commitment to ethical principles pertaining to provision or withholding of care, confidentiality, informed consent, and business practices, including compliance with relevant laws, policies, and regulations
- Demonstrate responsiveness to patient needs that supersedes self-interest while maintaining own well-being
- Provide appropriate role modeling

Systems-based Practice

- Work effectively in various health care delivery settings and systems relevant to one's clinical specialty
- Coordinate patient care within the health care system relevant to one's clinical specialty
- Incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population-based care
- Advocate for quality patient care and optimal patient care systems
- Utilize resources in the community that may provide assistance to patients
- Describe principles of utilization review and quality improvement