

University of Maryland Medicine Clerkship Goals and Objectives

These goals and objectives reflect the four key attributes that physicians need upon completion of their medical degree to be prepared for the practice of medicine. Physicians must be: **altruistic, knowledgeable, skillful, and dutiful**. (Boxed items are overall goals, and bullets beneath these boxes are specific objectives.).

At the completion of the Medicine Clerkship, students will be able to:

ALTRUISM

Demonstrate respect, compassion, accountability, integrity, and a responsiveness to the needs of patients that supercedes self-interest

- Demonstrate adherence to ethical principles of beneficence, non-malevolence, autonomy, and justice in daily practice
- Demonstrate the defining attributes of the medical professional, including:
 - Acts with honesty and integrity (being truthful, keeping one's word, meeting commitments and being forthright in interactions with patients, peers, and supervisors)
 - Shows reliability and responsibility (being responsible for and accountable to others, admitting error, honoring, completing assigned duties)
 - Shows respect for others in all spheres of contact and regard for others' worth and dignity
 - Strives for self-improvement so as to provide the highest quality of health care through life-long learning and education
 - Indicates self- awareness and a knowledge of one's own limits by recognizing the need for guidance and supervision
- Display the ability to critique care rendered through the completion of self-evaluation tools
- Respond positively to constructive criticism by improving behavior and/or skills

Demonstrate respect for confidentiality of patient information

- Demonstrates familiarity with the laws and rules governing the confidentiality of patient information
- Describe the circumstances necessary for obtaining informed consent
- Maintain the confidentiality of patient information, including patients' records

Advocate for quality patient care

- Identify the key personnel on the health care team who can advocate for the patient
- Refer patients to ancillary services
- Assist patients in the referral process

Demonstrate sensitivity and responsiveness to a diverse patient population, including, but not limited to, diversity in gender, age, culture, race, religion, disabilities and sexual orientation

- Discuss patient characteristics such as culture, age, gender, and disability as factors that must be considered when rendering care
- Demonstrate recognition of the cultural issues that can play an important role in how patients perceive the need for health care
- Consider the impact of disability on a patient's life and that of the family

KNOWLEDGE

Demonstrate an investigatory and analytic thinking approach to clinical situations

- Address the chief complaint as the starting point for a focused history and physical
- Seek and locate resources useful to secure information, e.g., attendings, faculty mentors, literature, electronic sources, group discussions, conferences, etc.
- Proceed in a logical, stepwise fashion in the evaluation and management of a patient by performing the H & P, generating a differential diagnosis from that H & P, arriving at and prioritizing a diagnostic workup based on the differential diagnosis, and determining a management plan based on all of these findings
- Adjust evaluation and management to new information (i.e. demonstrates flexibility in approach)

Know and apply the basic and clinically supportive sciences necessary to the care of patients (See Appendix 1 for a list of core topics covered in the curriculum)

- Identify learning objectives for the rotation by participation in orientation session
- Demonstrate required knowledge base in each discipline through such tools as written and oral examinations and conference participation
- Regularly attend and participate in all required conferences
- Seek appropriate venues for the expansion of knowledge base
- Seek feedback on areas of knowledge base weakness
- Takes a proactive role in one's own education, identifying and correcting areas of knowledge deficit

SKILLS

Gather essential and accurate information about the patient

- Describe age-specific concerns in the approach to the physical examination
- Perform a complete history including a chief complaint, history of the present illness, past history, family history, social history and review of systems
- Perform a detailed and accurate physical examination
- Convey an appreciation for the value of the caretaker's observations and judgments regarding the patient's health and illness
- Convey an appreciation for the opportunity to be involved in the care of the patient

Make informed diagnostic and therapeutic decisions based on patient information, current scientific evidence, and clinical judgment

- Generate an appropriate differential diagnosis from a chief complaint
- Formulate and prioritizes a basic differential diagnosis based on patient information, and/or current scientific evidence, and/or clinical judgment
- Attempt to interpret evidence in making diagnostic and therapeutic decisions
- Access available resources (medical literature, subspecialty consultants, on-line resources) to assure accuracy/currency of diagnostic and therapeutic intervention
- Discuss the therapeutic management of choice for a given working diagnosis
- Utilize and interprets the appropriate laboratory tests and imaging studies to evaluate medical problems
- Recognize limitations of the level of training by seeking help appropriately

Develop and carry out patient management plans

- Define the need for appropriate follow up based on age, diagnosis, and psychosocial issues
- Synthesize information from the H&P, laboratory evaluation, imaging studies, subspecialty consultants, and up to-date evidence in the literature to arrive at a sound therapeutic plan
- Recognize the importance of patient education as the foundation of compliance and disease management and prevention, e.g., by providing anticipatory guidance or discharge instructions for an inpatient
- Assist in counseling and education of patients and/or families regarding management plans
- Consider potential outcome measures for evaluating the effectiveness of the management plan,
- Demonstrates sensitivity to the preferences of patients and their families when arriving at a management plan

Provide effective health maintenance and anticipatory guidance

- Demonstrate knowledge of the recommended periodicity schedule for routine health supervision visits
- Define the major age and gender-specific objectives for each health maintenance visit
- Discuss the indications for and the interpretation of recommended screening tests
- Provides age/developmentally appropriate anticipatory guidance
- Demonstrate recognition of the importance of the focus on preventive medicine in primary care specialties by initiating discussions of preventive care in patient interactions

Work effectively with others as a member or leader of a health care team or other professional group

- Define the various roles played by members of the health care team, including nurses, social workers, therapists, and clerical staff
- Identify and learn the names of health care team members
- Adapt to the health care team's routines (rounds, conferences, etc.)
- Communicate effectively and respectfully with other members of the health care team
- Actively participate in the functioning of the team and completes assigned tasks
- Communicate with the team leader regarding any absences or difficulties
- Convey respect for other team members

Communicate effectively to create and sustain a therapeutic and ethically sound relationship with patients

- Identify the primary provider(s) of information
- Communicate with the patient or other key personnel in the appropriate setting by assessing the logistics of the working environment; e.g., private areas, public areas, areas for interviewing, areas for physical examination, etc.
- Identify the ethical and legal boundaries of the physician-patient relationship
- Identify self and explains role appropriately to patient and/or care givers/family members
- Dress professionally
- Perform a history and physical examination appropriate to the encounter
- Use appropriate language at the proper developmental level for the patient and/or care givers
- Demonstrate appropriate concern during patient interaction
- Demonstrate respect, compassion, and appreciation for the patient and the family
- Display an appreciation for multicultural differences and their impact on medical care

Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills

- Use effective verbal and non-verbal techniques used during history taking which convey concern for patients
- Define the appropriate format for presenting patient information, verbally or in writing
- Demonstrate the ability to listen compassionately to patient concerns
- Use correct English in written and verbal communication; writes legibly
- Provide accurate verbal and written communication

DUTIFUL

Locate, appraise, and assimilate evidence from scientific studies related to one's patients' health problems

- Demonstrate familiarity with the process of evidence-based medicine, including how to frame a clinical question, how to search the literature, how to appraise the literature, and how to apply the evidence
- Demonstrate familiarity with statistics for physicians by knowing the principles and statistical techniques necessary for these analyses, e.g., ARR, NNT, p values, risk ratios, odds ratios, meta-analyses, etc.

Use information technology to manage information, access on-line medical information; and support their own education

- Utilize web-based, textbook and library resources to effectively manage information
- Discuss some of the potential benefits/deficiencies of online resources
- Recognizes the importance of life-long learning by continuously seeking pertinent information from a variety of sources
- Facilitate the learning of peers and other health care professionals

Use information technology, peer review, and self-assessment to promote life-long learning

- Demonstrate a grounding in evidence-based medicine (knowledge of evidence from primary sources) in patient care discussions
- Use computer technology to find evidence and interpret an answer to a clinical question
- Apply the evidence to the individual patient

Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources

- Optimize individual patient care by recognizing the health care system context of each individual patient to optimizing that patient's care

Internal Medicine Clerkship Core Curriculum

The goal of the Internal Medicine Clerkship is to teach students the following:

1. Practical Skills
 - a. Interpretation of an EKG
 - b. How to read abdominal and chest films
 - c. How to perform basic procedures
 - d. How to analyze body fluids
 - e. How to interpret abnormal tests
 - f. How to interpret sensitivity and specificity
 - g. How to use antibiotics and other drugs

2. Evaluation of patients presenting with a symptom or sign
 - a. Abdominal Pain
 - b. Anemia
 - c. Chest Pain
 - d. Cough
 - e. Diarrhea
 - f. Dizziness and syncope
 - g. Dyspepsia
 - h. Dyspnea
 - i. Fatigue
 - j. Gastrointestinal bleeding
 - k. Headache
 - l. Fevers
 - m. Joint and muscular pain
 - n. Low back pain
 - o. Lower extremity pain, swelling and ulcers
 - p. Lymphadenopathy
 - q. Sleep disorders

3. Evaluation and Management of Patients with the Following Conditions
 - a. Cardiology
 - i. Common arrhythmias
 - ii. Congestive heart failure
 - iii. Ischemic heart disease
 - iv. Valvular heart disease
 - b. Dermatology
 - i. Pruritis
 - ii. Maculopapular rashes
 - iii. Scaling rashes
 - iv. Skin cancers
 - v. Vesicular lesions
 - c. Endocrinology
 - i. Adrenal disorders
 - ii. Diabetes
 - iii. Hyperlipidemia
 - iv. Thyroid and parathyroid disease
 - d. Gastroenterology
 - i. Biliary tract disease
 - ii. Liver disease
 - iii. Pancreatitis
 - e. Geriatrics
 - i. Benign prostate hyperplasia
 - ii. Dementia
 - iii. Polypharmacy
 - iv. Urinary incontinence

- f. Hematology and Oncology
 - i. Bleeding disorders
 - ii. Clotting disorders
 - iii. Colon cancer
 - iv. Leukemia
 - v. Lung cancer
 - vi. Lymphoma
 - vii. Breast cancer
 - viii. Prostate cancer
- g. Infectious Diseases
 - i. Encephalitis
 - ii. Endocarditis
 - iii. Genital infections
 - iv. HIV infections and complications
 - v. Meningitis
 - vi. Pneumonia
 - vii. Tuberculosis
 - viii. Urinary tract infections
- h. Nephrology
 - i. Acid base disturbances
 - ii. Acute renal failure
 - iii. Electrolyte disturbances of calcium, sodium and potassium
 - iv. Fluid management
 - v. Hypertension
- i. Neurology and Psychiatry
 - i. Altered mental status
 - ii. Stroke
 - iii. Seizures
 - iv. Motor weakness
 - v. Depression
 - vi. Delirium
 - vii. Substance abuse
- j. Pulmonary
 - i. Asthma
 - ii. Chronic obstructive lung disease
 - iii. Pulmonary embolism
 - iv. Solitary pulmonary nodules
- k. Rheumatology
 - i. Gout
 - ii. Rheumatoid arthritis
 - iii. Systemic lupus erythematosus
 - iv. Vasculitis
 - v. Immunodeficiency
 - vi. Osteoarthritis
 - vii. osteoporosis
- l. Women's Health
 - i. Abnormal pap smears
 - ii. Abnormal uterine bleeding
 - iii. Breast health and cancer
 - iv. Menopause
- m. Healthy patients
 - i. Periodic health screening
 - ii. Physical examinations
 - iii. Vaccinations

**This curriculum is adapted from the Curriculum set forth by the Clerkship Directors of Internal Medicine. The breadth of knowledge achieved will not be limited to only those topics outlined, and should reach the level of detail and understanding as that found in one of the major textbooks of Internal Medicine.*