I. Interpersonal and Communication Skills

**Verbal Communication: Written**

The student uses the written language effectively in:

1. Medical record documentation including progress notes in clerkships and other clinical rotations;
2. Papers, laboratory reports, journals, essays, exercises and online discussions assigned in clerkships, and other clinical rotations;
3. Journals, short stories, papers, or poetry assigned in medical humanities and social science courses;
4. Preparing written patient education material;
5. Writing research papers when applicable;
6. All official correspondence including e-mail and petitions.

The student offers constructive criticism when completing all course evaluations.

**Verbal Communication: Oral**

The student demonstrates competency in using oral language, even in stressful situations, by:

1. Communicating with patients and families in clerkships and other clinical rotations;
2. Presenting patients accurately and precisely to faculty in clerkships and other clinical rotations;
3. Giving talks and delivering lectures, utilizing slides and handouts, in clerkships and other clinical rotations;
4. Communicating with junior partners, other students, faculty, other health care professionals and health care team members;
5. Clearly answering questions during oral examinations.

- In clerkships and other clinical rotations, the student uses patient-centered and doctor-centered interviewing skills when taking a targeted or complete history and/or performing a targeted or complete physical examination.
- In clerkships and other clinical rotations, the student interacts effectively with angry patients, patients from diverse backgrounds, and patients with sensitive issues including chemical abuse, spirituality, sexuality, intimate partner violence, and life threatening illness.
- In clerkships and other clinical rotations, the student provides accurate patient education and counseling as needed and uses techniques that promote adherence to physician advice.

**Nonverbal Communication**

- The student demonstrates effective nonverbal communication skills, including stressful situations, with faculty, staff, other health care professionals, patients, and students (especially those in their docent group, on other health care teams, and in study groups.)
• The student demonstrates effective listening skills, including stressful situations, with faculty, staff, other health care professionals, patients, and students (especially those in their docent group, on other health care teams, and in study groups.)

Doctor Patient Relationship

• The student establishes positive relationships with patients, regardless of acuity, to enhance patient adherence, satisfaction, and therapeutic outcome.

II. Medical Knowledge including Applications of Basic Science & Problem-Solving

Applies basic science to answer questions, solve problems, and care for patients.

• The student applies important facts and concepts in biostatistics, immunology, microbiology, pathology, and pharmacology in order to solve problems/answer questions posed within each of the core clerkships.

• The student applies key neuroscience facts and concepts that are related to health and disease and can use them in solving problems/answering questions within each of the core clerkships.

• The student applies, and is able to solve problems/answers questions using advanced facts and concepts in anatomy, behavioral/social sciences, biochemistry, genetics, and physiology as they pertain to each of the core clerkships.

• The student applies facts and concepts of anatomy, behavioral/social sciences, biochemistry, biostatistics, genetics, immunology, microbiology, neurosciences, pathology, pharmacology, and physiology to the overall care of the patient on each of the core clerkships.

Applies clinical science to solve problems and care for patients.

• The student applies basic facts and concepts from the clinical sciences on each clerkship and electives to patient types that have been specified for years 5&6.

• The student displays competence in solving common clinical problems by utilizing an advanced knowledge base that comes from their experience in family and internal medicine, continuing care clinic in the Year 5 & 6 core clerkships.

Applies basic and clinical science to understand, explain, and solve complex, multi-system problems.

• The student is able to explain a multi-system health problem in terms of pathogenesis, mechanisms of system-to-system interactions, and potential complications.

• The student is able to present therapeutic goals and interventions aimed at the multiple pathophysiologic forces in motion.
• The student demonstrates clinical decision-making that weighs the pros and cons of proposed interventions and takes into consideration such factors as drug-drug interactions and the trade-off of proposed drug interventions in the context of multi-system problems.

III. Practice-based Learning and Improvement including Lifelong Learning & Self-Appraisal

Practices self-reflection and self-improvement.

The student exhibits behaviors indicative of self-awareness through a process of self-reflection about their cognitive, emotional, and social abilities:

• The student utilizes skill in coping with stress during clinical rotations and practices effective techniques to reduce that stress while continuing to function satisfactorily.

• The student responds to constructive criticism: values well-founded praise but also uses the critique to address his/her deficiencies and modifies behavior accordingly.

• The student actively seeks feedback for improvement from residents and faculty and is pro-active in asking for assistance to maximize the outcomes he/she can achieve from a clinical experience.

• The student successfully balances their academic obligations, clinical responsibilities and their personal needs or seeks out resources to do so.

• The student is reflective about him or herself in a group and team context and with assistance from faculty and peers is able to modify his/her behavior that is counterproductive.

The student continues to recognize his/her own limits of knowledge and experience in medicine.

The student identifies his/her learning needs in order to achieve the learning objectives of Year 5 and 6 courses and rotations, plans a program to meet those needs, determines how well they have met them, and decides what further learning issues they need to address.

The student explores new opportunities for intellectual growth and professional enlightenment from the connection between medicine and the social sciences and humanities.

The student demonstrates lifelong learning and information-seeking and evaluation skills.

• The student demonstrates more advanced lifelong learning skills including comprehension of more complex medical literature, more accurate critical appraisal of studies using the scientific method, formulation of more advanced questions for literature searches, and performance of more productive literature searches to locate information relevant to addressing clinical problems, including those of his/her own patients.
• The student recognizes the significance of valid scientific discoveries reported in medical journals and identifies unsubstantiated, inaccurate, or poorly performed studies and conclusions.

• The student is able to justify care plans for patients in terms of evidence-base medicine.

• The student is able to describe the process of continuing quality improvement of patient care, conduct a basic analysis of their practice with a limited number of their patients who have a common straightforward medical problem, and contribute to a CQI analysis of their docent team’s practice under supervision.

• The student understands that analysis of gaps in physicians’ knowledge, skills, and practice forms the basis for continuing medical education.

IV. Systems-based Practice

Actively incorporates the psychological, social, cultural and economic factors into patient care and proposes ways to address them as needed.

• In clinical clerkships and electives the student takes personal responsibility for identifying non-biological factors as part of routine history-taking; discusses them with patients, assesses their needs, and matches those needs to appropriate community resources.

• The student is able to identify and propose solutions for non-biological factors that influence health, disease, disability and access to care.

The student advocates for patients and families.

• The student is an advocate for better health for the patients and the community.

• Students advocate for quality patient care and assist patients personally in dealing with system complexities in the clinical clerkships.

• The student assists patients and their families to deal with system complexities in the continuity clinic and on clinical clerkships.

Manages inter- and intra-healthcare systems.

• The student demonstrates knowledge of practice management, utilization review, quality improvement, and improvement in economic and cultural issues in health care.

• Students demonstrate the ability to partner with other health care providers to coordinate and improve the care of their patients and know how these activities can affect system performance.

• The student shows effective leadership skills in coordinating various members of the health care team, such as PharmDs, clinical medical librarians, social workers, interpreters, and nurses, for assistance in the comprehensive care of patients and their families.
Utilizes resources effectively.

- The student is able to utilize resources in the community that may provide assistance to patients
- The student practices cost-effective health care in decision-making that positively impacts the care of their patients in different clerkship specialties.

Takes into account how public policy impacts the practice of medicine.

- The student practices and applies how public policy related to health, health care funding and finance, delivery systems, and health care reform impacts the practice of medicine in continuing care clinic and on the clerkships.

V. Patient Care including history-taking, physical exams, procedures, diagnosis & management

Patient Care

Takes a patient history.

The student is able to perform the basic and emergency elements of a history smoothly and efficiently in the outpatient setting, inpatient setting, critical care setting, and emergency department setting including:

1. Chief complaint
2. History of Present illness
3. Past medical history
4. Current health status (allergies, immunizations, current medications, and social history including tobacco, alcohol and other substances)
5. Family history
6. Sexual history
7. Psychosocial
8. Review of Systems
9. Pediatric: birth history, feeding history, growth and development, childhood illnesses

Performs a physical examination.

The student is able to perform the basic and emergency elements of a physical examination smoothly and efficiently in the outpatient setting, inpatient setting, critical care setting, and emergency department setting.

The student can perform a comprehensive physical, functional and mental status examination for the adult and pediatric patient including:

- General functional assessment.
- Pediatric physical examination.
- Well newborn examination.
- Psychiatric examination.
• General mental status examination.

• Emergency-directed examinations:

  1. Neurologic emergencies
  2. Respiratory emergencies
  3. Cardiac emergencies
  4. Acute abdomen
  5. Multiple-system trauma

Performance of selected basic procedures.

The student will have performed and will be aware of the indications, complications and limitations of basic clinical procedures including:

  1. Airway management (bag, mask ventilation)
  2. Basic Cardiopulmonary Resuscitation
  3. Complete Advanced Cardiac Life Support
  4. Establishing peripheral venous access
  5. Fluorescein staining and examination of the eyes
  6. Incision and drainage of superficial lesions
  7. Injections: intra-dermal, subcutaneous, intramuscular, and intravenous
  8. Insert nasogastric tube, internal feeding tube, manage nutrition
  9. Normal vaginal delivery
  10. Placement of Foley catheter; male, female
  11. Removal of cerumen from ear
  12. Suturing simple lacerations with local anesthesia
  13. Apply temporary/emergency orthopedic splint
  14. Universal precautions (infectious)
  15. Work with sterile technique (e.g. gloving, sterile dressing change)
  16. Rectal examination
  17. Prostate examination
  18. Pelvic examination
  19. Pap smear

Observes and/or describes selected advanced procedures.

The student will have observed and is able to state the indications, complications, and limitations of the following advanced clinical procedures:

  1. ACLS algorithms
  2. General airway management principles (BLS, oral airway, nasal airway, suctioning)
  3. Cardioversion and defibrillation
  4. Central line placement
  5. Arterial puncture (for blood gas)
  6. Placement of arterial line
  7. Arthrocentesis
  8. Lumbar puncture
  9. Circumcision
  10. Colposcopy and/or hysteroscopy
11. Fetal/labor monitoring
12. Childbirth/delivery, other than normal vaginal delivery
13. Bilateral tubal ligation
14. Hysterectomy
15. Paracentesis
16. General anesthesia
17. Skin biopsy (punch)
18. Thoracic surgical procedure
19. Abdominal surgical procedure
20. Hernia repair
21. Vascular surgical procedures
22. Endotracheal intubation
23. Ventilator management
24. Colonoscopy
25. Hemodialysis

The student is able to describe the procedural steps necessary to carry out advanced clinical procedures as listed:

1. Thoracentesis
2. Chest tube
3. Limited ultrasound
4. TPN/Enteral management
5. Diagnostic peritoneal lavage
6. Exercise stress testing
7. Regional block anesthesia
8. Placement of a Swan-Ganz catheter

Performs and/or interprets lab and diagnostic tests.

The student is able to perform and interpret basic lab and diagnostic tests including:

1. Cervical culture
2. Pap smear and report
3. EKG
4. Fingerstick glucose determination
5. Peak expiratory flow rate
6. Stool occult blood
7. Throat culture
8. Tuberculin skin test
9. Urethral culture
10. Urinalysis
11. Urine pregnancy test
12. Vaginal smear wet prep

The student is able to personally interpret basic clinical procedures and laboratory and diagnostic tests accurately as listed:

1. Urinalysis
2. Chest X-ray
3. Abdominal series x-ray
4. Extremity x-rays
5. Hip and pelvis x-rays
6. Spine x-rays
7. Head CT
8. CSF analysis
9. Heme occult test
10. Urine pregnancy test
11. Arterial blood gas
12. Ascitic fluid analysis
13. Hematology studies
14. Blood chemistry
15. Coagulation studies
16. Joint fluid analysis
17. Pleural fluids analysis
18. Basic pelvic and abdominal ultrasound
19. Cardiac stress tests
20. Culture and sensitivities-Blood, urine, sputum, wound cultures
21. Cytology
22. Drug levels
23. EEG and EMG
24. Stool for ova and parasites
25. Interpret Pap smear report
26. Cervical culture

The student has familiarity with more complex or specialized lab or diagnostic tests. The student can describe the indications, complications, and limitations of frequently used lab and diagnostic tests as well as be able to interpret written reports of the tests including:

1. MRI of head
2. Anatomic pathology
3. Basic angiography
4. Holter monitor studies
5. Immunologic studies
6. Acid fast smear
7. Peripheral blood smear
8. Pulmonary function tests
9. Basic cardiac echocardiography
10. Basic Doppler studies
11. Basic pelvic and abdominal CT
12. Basic non-invasive vascular studies
13. Drug, antibiotic levels
14. Genetic studies
15. Sleep studies

**Diagnosis, Management, and Prevention**

- The student is able to state the most likely diagnosis and management plan when presented with patient presentations of common problems in any of the major disciplines.
• The student is able to integrate the approach of care to individuals, families, and communities, taking advantage of opportunities for prevention and education in addition to the immediate physical care.

• The student, through his/her experiences in the continuing care clinic, is able to provide continuing care and management for both chronic and acute medical problems and provide appropriate plans for prevention.

• The student is able to use information technology to assist patient care decisions, generate plans and in educating patients.

VI. Professionalism

Professionalism

• The student identifies the elements of professional behavior, can explain the meaning of each element: respect, compassion and empathy, altruism, honesty, accountability, and excellence, and teaches them to younger students.

  Respect: The student shows courteous regard for patients, student, faculty and health care team members, and acknowledges their views. In doing so, the student takes into account different value systems and life styles of people with whom they interact while being aware of his/her own value system and life style.

  Compassion and Empathy: The student interacts with patients, patient families and members of the health care team in an appropriately empathic and compassionate fashion. He/she utilizes empathy as a therapeutic technique.

  Altruism: The student resolves potential conflicts between his/her own needs and the legitimate needs of his/her patients or health care team members appropriately and can discuss a credible rationale for the resolution. He/she can explain the importance of altruism in medicine to younger students.

  Honesty: The student is honest in all aspects of coursework for the baccalaureate-MD degree and takes responsibility for his/her errors in the patient care setting after discussion with little or no supervision. He/she can explain the importance of honesty in medicine to younger students.

  Accountability: The student carries through on assignments and other responsibilities; attends all required course and clerkship sessions; arrives promptly for meetings, classes, rounds and clinics; keeps scheduled appointments; accepts personal responsibility for group projects and for assigned patients; and completes course evaluations in a timely and thoughtful fashion. Where appropriate, the student gives feedback to his/her junior partner about accountability.

  Excellence: The student searches out opportunities to learn; demonstrates lifelong learning skills; contributes to the docent team and other small groups by sharing knowledge and skills, raising questions, and finding answers; and endeavors to excel in coursework and scholarship. And inspires younger students to pursue excellence in his/her behavior.
• The student gives examples of how each of the elements of professionalism applies to Year 5 and Year 6 coursework for the baccalaureate and MD degrees and actively demonstrates them by his/her own behavior.

• He/she teaches these elements of professional behavior to junior students by explicit role modeling, especially vis à vis the junior partner.

Medical Ethics

• The student is able: to identify ethical issues and choices in patient care and health policy in his/her clinical experience; to evaluate alternative ethical courses of action by analyzing and articulating reasons for the relative importance of the different ethical considerations bearing on each choice; and to select and ethically defend a course of action.

• The student recognizes the importance of the ethical treatment of research subjects and the functions of an Institutional Review Board.

• The student is able to teach junior students the application of foundational principles of medical ethics to their patients.

• The student can confront his/her own ethics and values as they relate to more advanced ethical issues related to their experiences in the core specialty clerkships.

• The student develops a deeper appreciation for their personal beliefs by presenting and defending their position while acknowledging the beliefs of others.