

Clinical Clerkship Curriculum Pediatrics



AUC Clinical Curricula Guide to Duty Hours, Minimum Experience and Procedure Thresholds, Learner to Teacher Ratios, and Recognition

- I. In all rotations, AUC expects that students will follow the most recent ACGME duty-hour requirements for PGY-1 level residents, as specified for each rotation area.
- II. In all rotations, AUC expects that students who are required to be on call will be accommodated as required by the ACGME for residents on call.
- III. Each core rotation will indicate a minimum threshold experience to help prepare the student gain competency.
Pediatrics – Perform 2-3 newborn and 5 well-baby examinations over the duration of the six-week clerkship. Recognize disease entities and perform procedural skills as outlined in the syllabus.
- IV. Each student must have adequate direct exposure with an attending and/or resident physician during the majority of the rotation. There should be no more than two learners (student and any other learner on the service) per resident or three learners for an attending. Lectures, library, or video are considered direct exposure.
- V. Each student must have recognition of the site where training is being performed. This includes direct knowledge of the student being trained at the site with written verification and appropriate badging of the student as a visiting student or other appropriate designation.

Pediatrics

Student Core Clerkship Curriculum

Pediatrics is a core clerkship of six weeks duration. All pediatrics clerkships are conducted at teaching hospitals that have an ACGME-accredited residency in pediatrics; at a Federally Qualified Health Center that is listed by ACGME as a participating institution in a pediatrics residency program where parts of the clerkship are conducted in a hospital or outpatient site by board-certified pediatricians; or in the U.K. at a SIFT-approved hospital that has a pediatrics department with certified pediatricians. An extensive curriculum has been developed and frequently revised. The goal of the curriculum is to present material related to pediatrics that will be required for any physician regardless of the specialty s/he chooses to pursue.

Pediatrics is a specialty involved very much in preventative care, growth and development, genetics, family counseling, and social and psychological care. The history, physical and development of the child are very important in developing a plan to care for pediatric patients. Lack of preparation in this area is a handicap for a physician caring for a pediatric patient. The specialty of pediatrics has become subspecialized recently. A subspecialist now cares for children with complicated or chronic diseases. Future general physicians will be doing more office care and counseling. There is talk of hospitals solely hiring physicians to care for the admitted sick. With this in mind, medical schools should prepare their students to feel comfortable in this arena of care. There is an effort to encourage thinking in terms of basic principles with the goal to understand the principles, know where to find specific information and recognize the limits of one's knowledge and skills.

Pediatric care is often office-based; however, sick patients are admitted to the hospital and can provide a wealth of knowledge and education in the course of their workup and treatment process. In order to provide a sound education, both office care and hospital are necessary for third-year medical students. Supervised performance on hospital wards, office settings or clinics and on-call work are necessary for the growth of the student. Some experience in neonatology and ER or after-hour clinics should be entertained.

This curriculum is intended to serve as a basis for instruction to medical students during their core clerkship in pediatrics. It is intended to provide a common level of knowledge, proficiency and procedural competency for any student at any training site. It incorporates key strategic goals:

1. Vertical integration of basic science and clinical curricula.
2. Competency-based learning and evaluation.
3. Bridging of typical resident curriculum guidelines including ACGME competencies.
4. Adherence to current standards in medical education and the practice of medicine.

The curriculum is not intended to list or describe every common entity seen in the practice of pediatrics. It is, however, expected that the student will have exposure to a wide variety of

medical problems encountered in the practice of pediatrics in both the hospital and ambulatory settings. It is also anticipated that students will learn through didactic lectures and independent reading the specific issues required to deal with the clinical problems presented.

COMPETENCIES

PATIENT CARE

Students must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Students should develop and demonstrate specific skills, including:

1. Communicate effectively with patients and families to gather accurate historic and physical information.
2. Work with other health care providers, including those from multidisciplinary teams.

Educational Experiences

- a. History-taking
- b. Growth and development
- c. Physical examinations
- d. Admission work-up and follow-up
- e. Associated problems of the pediatric patient
- f. Perform patient care with other health care providers
- g. Periodic health screening
- h. Immunizations
- i. Risk assessment and factors
- j. Counseling issues
- k. Promotion of healthful lifestyles

Potential Evaluation Methods

Case presentation, global rating and simulation lab. resident evaluations, 360° survey, written standardized evaluation and rotation-specific faculty grade forms.

MEDICAL KNOWLEDGE

Students must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g., epidemiological and social-behavioral) sciences and the application of this knowledge to patient care in pediatrics. Students should be able to define, describe and discuss:

1. The methods of deductive reasoning, forward thinking and pattern recognition in clinical decision-making.
2. How critical pathways or practice guidelines can be used to guide diagnostic test ordering and therapeutic decision-making.

3. The indications for testing, range of normal, critical values, pathophysiologic implications of abnormal results and the relative cost of diagnostic tests and procedures commonly encountered in the practice of pediatrics.
4. The basic ethical principles in medicine, including autonomy, beneficence, nonmaleficence, truth telling and confidentiality and respect for autonomy (informed choice).
5. The general types of preventive care issues that should be addressed on a routine basis in pediatric patients.
6. The key sources for obtaining updated information on issues relevant to the medical management of the pediatric patient and key questions to ask when critically appraising medical articles.

Potential Evaluation Methods

Chart review, case presentations, simulations, global evaluation.

PRACTICE-BASED LEARNING AND IMPROVEMENT

Students must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices. Students are expected to:

1. Demonstrate self-directed learning.
2. Acknowledge gaps in knowledge and skills and develop a plan to address them.
3. Locate, appraise (using knowledge of study design and statistical methods), and assimilate evidence from scientific studies related to their patients' health problems.
4. Use information technology to support patient care decisions and patient education.
5. Summarize and present to colleagues what was learned from consulting the medical literature.
6. Seek feedback regularly and respond appropriately and productively.

Potential Evaluation Methods

Review study plan, chart review, global evaluation, journal club presentations.

INTERPERSONAL AND COMMUNICATION SKILLS

Students must be able to demonstrate interpersonal and communication skills that result in effective information exchange with patients, patients' families, and professional associates. Students are expected to:

1. Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.
2. Prepare and present, written and oral, comprehensive and focused, inpatient and outpatient cases that include all relevant features, as clinically appropriate.
4. Work effectively with others as a member of a health care team, incorporating skills in inter-professional communication and collaboration.

5. Develop a therapeutic and ethically sound relationship with patients.

Potential Evaluation Methods

Global evaluation, observation of history and physical, OSCE.

PROFESSIONALISM

Students must demonstrate a commitment to carrying out the responsibilities as a student and future professional, adherence to ethical principles, and sensitivity to a diverse patient population. Students are expected to:

1. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities.
2. Demonstrate professional behavior in areas of reliability, honesty, responsibility, helpfulness, selflessness, appearance, and initiative.

Potential Evaluation Methods:

Observation and rating by attending physician, residents, nurses, and or patients (global rating), OSCE and chart review.

SYSTEMS-BASED PRACTICE

Students must demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value. Students are expected to:

1. Understand the concept of systems-based practice and how other professionals, organizations, and society affect patient care.
2. Understand barriers to care faced by patients in the community setting and the key personnel and programs in and out of the hospital that may be able to contribute to the ongoing care of patients
3. Demonstrate a commitment to cost-effective health care and resource allocation that does not compromise the quality of care.
4. Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.
5. Understand the principles of clinical quality improvement and the analysis and improvement of systems to address common quality problems (e.g. treatment delays, medication errors, failure to use evidence-based diagnostics/treatments, failure to provide preventive care).

Potential Evaluation Methods

Chart review, case presentations, OSCE, global rating.

Procedures

Students will be encouraged to observe or perform (with faculty supervision) the following procedures:

1. Venipuncture
2. Throat culture
3. Nasogastric tube
4. Urethral catheterization

Didactic Teaching Sessions

Students are expected to attend all lecture sessions and activities, including those below:

1. Rounds with house staff on ward patients, and progress reports
2. Attending rounds solely with students
3. Daily conferences on various diseases
4. Admissions and workups
5. Call with house officer
6. Patient contact in office settings, clinics and emergency
7. Case-based exercises with preceptor
8. Skill session on interviewing and examining pediatric patient
9. Independent study of daily clinical issues
10. Expected knowledge of pertinent pediatrics diseases

Disease Entities

1. Neonatal Pediatrics
 - a. Prematurity and respiratory distress
 - b. Intrauterine growth retardation
 - c. Neonatal jaundice
 - d. Common congenital abnormalities (cleft lip, hip dislocation)
2. Neurology
 - a. Cerebral palsy
 - b. Mental sub-normality
 - c. Deafness and language delay
 - d. Developmental Issues
 - e. Health Surveillance
3. Immunization and prevention of illness
4. Health and education
 - a. Accidents: physical and sexual abuse
 - b. Identifying a child with psychiatric problems
 - c. Adolescent medicine
 - d. Implications for later life of childhood illness
5. Respiratory
 - a. Asthma

- b. Cystic fibrosis
- c. Common respiratory illness (croup, otitis media, etc.)
- 6. Renal and Genitourinary
 - a. Urinary tract infection
 - b. Nephrotic syndrome and acute nephritis
 - c. Undescended testicles
- 7. Gastroenterology
 - a. Pyloric stenosis
 - b. Intussusception
 - c. Appendicitis
 - d. Colitis
- 8. Metabolic and Endocrine
 - a. Diabetes Mellitus
 - b. Hypothyroidism
 - c. Growth Disorders
- 9. Hematology and Oncology
 - a. Sickle cell disease and thalassemia
 - b. Iron deficiency
 - c. Idiopathic thrombocytopenia purpura
 - d. Acute lymphoblastic leukemia
 - e. Common solid tumors (neuroblastoma, nephroblastoma)
- 10. Immunology and Allergy; Immunodeficiency
- 11. Nutrition
 - a. Breast-feeding
 - b. Infant feeding problems
 - c. Obesity and malnutrition
- 11. Psychological and Social
 - d. Emotional disorders
 - e. Conduct disorders
 - f. Encopresis and enuresis
 - g. Hyperactivity and ADD
 - h. Autism
 - i. School problems
 - j. Abdominal pain recurrent

Work Hours

Students are encouraged to take night call with their team, but must never exceed ACGME duty hour standards for residents.

Resources

1. Simulation lab
2. Library
3. Internet access and medical data base availability
4. Recommended reading
 - a) A condensation of medical student educational objectives can be found in the following student textbooks

- *Barnett's Text Book of Pediatrics*
- *Nelson's Textbook of Pediatrics*
- *Pediatric Red Book*
- *AAP Updates (Tape Program)*
- *Pediatrics in Review*

Final evaluation and outcome measure:

NBME subject exam and attending written evaluation and narrative

