

**COMPETENCY BASED CURRICULUM FOR PEDIATRIC RESIDENCY EDUCATION
CONTINUITY, AMBULATORY AND ACUTE CARE AT KCHC SUITE 5D AND UHB SUITE D
PL3 RESIDENTS**

Standard Rotation: Combined Continuity and Acute Care – PGY 3

Residents: Pediatric residents at the PL3 level

Prerequisites: Satisfactory completion of the PL2 year of training

UHB Suite D and KCHC Suite D; one session per week for a minimum of 36 sessions per year

Primary Goals for this Rotation

GOAL: Health Promotion and Screening. Provide comprehensive health care promotion, screening and disease prevention services to infants, children, adolescents and their families in the ambulatory setting.

Perform health promotion (well child care) visits at recommended ages based on nationally recognized periodicity schedules (e.g., AAP Health Supervision Guidelines).

Perform family-centered health supervision interviews.

1. Define family and identify significant family members and other significant caretakers and what role they play in the child's life.
2. Identify patient and family concerns.
3. Discuss health goals for the visit with the patient and family.
4. Prioritize agenda for the visit with the patient and family.
5. Elicit age-appropriate information regarding health, nutrition, activities, and health risks.

Perform age-appropriate developmental surveillance, developmental screening, school performance monitoring and job performance monitoring.

1. Identify risks to optimal developmental progress (e.g., prematurity, SES, family/genetic conditions, etc.).
2. Identify patient and parental concerns regarding development, school, and/or work.
3. Perform standardized, validated, accurate developmental screening tests for infants and children until school age.

Critically observe interactions between the parent and the infant, child, or adolescent.

Perform physical exam with special focus on age-dependent concerns and patient or family concerns.

Order or perform and interpret additional age-appropriate screening procedure, using nationally-recognized periodicity schedules and local expectations (e.g., newborn screening, lead, hematocrit, hemoglobin for sickle cell, blood pressure, cardiovascular risk assessment, vision, hearing, dental assessment).

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Order or perform appropriate additional screening procedures based on patient and family concerns (e.g., sports involvement, positive family history for specific health condition, behavioral concerns, depression, identified risk for lead exposure).
Perform age-appropriate immunizations using nationally-recognized periodicity schedules.
Provide age-appropriate anticipatory guidance to parent(s) or caregiver(s), and the child or adolescent, according to recommended guidelines (e.g., AAP TIPP program). Address topics including:
Promotion of healthy habits (e.g., physical activity, reading, etc.)
Injury and illness prevention
Nutrition
Oral health
Promotion of positive interactions between the parent and infant/child/adolescent
Promotion of responsibility (adolescence)
Promotion of school achievement (middle childhood, adolescence)
Sexuality (infancy, early and middle childhood, adolescence)
Prevention of substance use/abuse (childhood, adolescence)
Physical activity and sports
Interpretation of screening procedures
Prevention of violence
Work collaboratively with professionals in the medical, mental-health, educational and community system to optimize preventive health services for children.
Demonstrate practical office strategies that allow provision of comprehensive and efficient health supervision (e.g., share tasks with office staff; develop and use structured records, computerized information, websites, patient education handouts, books, develop office policies for such things as consent and confidentiality, request for transfer of medical records, school information).
Discuss logistical barriers to the provision of health supervision care (e.g., financial, social, environmental, health service, insurance systems) and discuss

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strategies to overcome these for specific families.

**GOAL: Common Signs and Symptoms (Continuity Clinic and Primary Care OPD).
Evaluate and manage common signs and symptoms associated with the practice of
pediatrics in the Continuity Clinic and Primary Care Pediatric Outpatient Department.**

Evaluate and manage the following signs and symptoms that present in the context of health care promotion:

1. Infancy: malpositioning of feet, hip clicks, skin rashes, birthmarks, jitteriness, hiccups, sneezes, wheezing, heart murmur, vaginal bleeding and/or discharge, foul smelling umbilical cord with/without discharge; undescended testicle, breast tissue, breast drainage, malrotation of lower extremities, developmental delays, sleep disturbances, difficulty feeding, dysconjugate gaze, failure to thrive, frequent infections, abnormal head shape or size, evidence of abuse or neglect, abdominal masses, abnormal muscle tone
2. General: Acute life-threatening event (ALTE), constitutional symptoms, excessive crying, failure to thrive, fatigue, fever, weight loss or gain, dental caries, excessive thumb-sucking or pacifier use, sleep disturbances, difficult behaviors, variations in appetite, variations in toilet training, overactivity, somatic complaints, poor school performance, attention problems, fatigue, masturbation, anxiety, violence
3. Cardiorespiratory: Apnea, chest pain, dyspnea, heart murmur, hemoptysis, hypertension, shortness of breath, stridor, syncope, tachypnea, wheezing
4. Dermatologic: Congenital nevus and other birth marks, ecchymoses, edema, paleness, petechiae, pigmentary changes, purpura, rashes, urticaria, vascular lesions, foul smelling umbilical cord
5. EENT: Acute visual changes; dysconjugate gaze; conjunctival injection; ear or eye discharge; ear, throat, eye pain, edema, epistaxis; nasal foreign body; hoarseness; stridor
6. Endocrine: growth disturbance, short stature, heat or cold intolerance, normal and abnormal timing of pubertal changes, polydipsia, polyuria
7. GI/Nutrition/Fluids: Abdominal pain, mass or distention; constipation; dehydration; diarrhea; dysphagia; encopresis; hematemesis; inadequate intake; jaundice; melena; obesity; rectal bleeding; reflux; vomiting
8. Genitourinary/Renal: Change in urine color, dysuria, edema, enuresis, frequency, hematuria, oliguria, pain referable to the urinary tract, scrotal mass, pain or edema, trauma to urinary tract or external genitalia, undescended testicle, enuresis
9. GYN: Asymmetry of breast development, abnormal vaginal bleeding, pelvic or genital pain, vaginal discharge or odor; vulvar trauma or erythema, delayed onset of menses, missed or irregular periods
10. Hematologic/Oncologic: Abnormal bleeding, bruising, lymphadenopathy, masses, pallor
11. Musculoskeletal: Malpositioning of feet, malpositioning of legs, hip clicks, abnormal gait, abnormal spine curvature, arthritis or arthralgia,

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bone and soft tissue trauma, limb or joint pain, limp, variations in alignment (e.g., intoeing)

12. Neurologic: Delays in developmental milestones, ataxia, change in sensorium, diplopia, headache, head trauma, hearing concerns, gait disturbance, hypotonia, seizures, tremor, vertigo, visual disturbance, weakness
13. Psychiatric/Psychosocial: Anxiety, behavioral concerns; conversion symptoms, depression, hyperactivity, suspected child abuse or neglect

GOAL: Common Conditions (Continuity Clinic and Primary Care OPD). Recognize and manage common childhood conditions presenting to the Continuity Clinic and Primary Care Pediatric Outpatient Department.

Evaluate and manage the common conditions and situations presenting in the context of health promotion visits.

1. Infancy: Breast feeding, bottle feeding, colic, reflux, congenital hip dislocation, constipation, strabismus, colic, parent-infant interactional issues, sleep problems, child care decisions, separation protest, stranger anxiety, failure to thrive, recurrent respiratory and ear infections, positional foot deformities, rashes, teething, injury prevention and safety
2. General: Colic, failure to thrive, fever, overweight, iron deficiency, lead exposure, strabismus, hearing problems, child care decisions, well-child and well adolescent care (including anticipatory guidance), parental issues (financial stress, divorce, depression, tobacco, alcohol or substance abuse, domestic violence, inadequate support networks)
3. Allergy/Immunology: Allergic rhinitis, asthma, food allergies, recurrent infections, urticaria
4. Cardiovascular: Congenital heart disease (outpatient management of minor illnesses), congestive heart failure, heart murmurs, palpitations, rheumatic fever
5. Dermatology: abscesses, acne, atopic dermatitis, cellulitis and superficial skin infections, impetigo, molluscum, tinea infections, viral exanthems, verruca vulgaris, other common rashes of childhood and adolescence
6. Endocrine/Metabolic: Diabetes mellitus, evaluation for possible hypothyroidism, growth failure or delay, gynecomastia, hyperthyroidism, precocious or delayed puberty
7. GI/Nutritional: Constipation, obesity, encopresis, foreign body ingestion, gastroenteritis, gastroesophageal reflux, hepatitis, inflammatory bowel disease, nutritional issues
8. GU/Renal: Electrolyte and acid-base disturbances (mild), enuresis, proteinuria, undescended testicles, UTI/pyelonephritis
9. Gynecologic: Genital trauma (mild), labial adhesions, vaginal discharge or foreign body
10. Hematology/Oncology: Abdominal and mediastinal mass (initial work up), anemia, hemoglobinopathies, leukocytosis, neutropenia, thrombocytopenia

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11. Infectious Disease: Cellulitis, cervical adenitis, initial evaluation and follow-up of serious, deep tissue infections, otitis media, periorbital and orbital cellulitis, pharyngitis, pneumonia (viral or bacterial), sinusitis, upper respiratory tract infections, viral illness, recurrent infections
12. Musculoskeletal: Growing pains, hip dysplasia, limp, genu varus, genu valgus, metatarsus adductus, sprains, strains, tibial torsion
13. Pharmacology/Toxicology: Ingestion avoidance (precautions)
14. Neurology/Psychiatry: Acute neurologic conditions (initial evaluation), behavioral concerns, discipline issues, temper tantrums, biting, developmental delay,
15. Pulmonary: Asthma, bronchiolitis, croup, pneumonia; sinusitis, tracheitis, viral URI and LRI

GOAL: Diagnostic Testing (Continuity Clinic and Primary Care OPD). Utilize common diagnostic tests and imaging studies appropriately in the outpatient department.

Demonstrate understanding of the common diagnostic tests and imaging studies used in the outpatient setting, by being able to:

1 :Explain the indications for and limitations of each study.

2 :Know or be able to locate age-appropriate normal ranges (ie: for lab studies).

3 :Apply knowledge of diagnostic test properties, including the use of sensitivity, specificity, positive predictive value, negative predictive value, likelihood ratios and receiver operating characteristic curves, to assess test utility in clinical settings.

4 :Recognize cost and utilization issues.

5 :Interpret the results in the context of the specific patient.

6 :Discuss therapeutic options for correction of abnormalities.

Use appropriately the common laboratory studies in the Continuity Clinic and Outpatient setting:

1. CBC with differential, platelet count, RBC indices
2. Blood chemistries: electrolytes, glucose, calcium, magnesium, phosphate
3. Hemoglobin A1C
4. Cholesterol
5. Renal function tests
6. Tests of hepatic function (PT, albumin) and damage (liver enzymes, bilirubin)
7. Serologic tests for infection (e.g., hepatitis, HIV)
8. CRP, ESR
9. Routine screening tests (e.g., neonatal screens, lead)

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10. Tests for ova and parasites
11. Thyroid function tests
12. Culture for bacterial, viral, and fungal pathogens, including stool culture
13. Urinalysis
14. Developmental, behavioral and depression screening tests

Use the common imaging, diagnostic or radiographic studies when indicated for patients evaluated in Continuity Clinic or the Outpatient Pediatric Clinic:

1. Plain radiographs of the chest, extremities, abdomen, skull, sinuses
2. CT, MRI, angiography, ultrasound, nuclear scans (interpretation not expected) and contrast studies when indicated
3. Bone age films
4. Electrocardiogram and echocardiogram
5. Skin test for tuberculosis

GOAL: Monitoring and Therapeutic Modalities (Continuity Clinic and Primary Care OPD). Understand how to use physiologic monitoring and special technology in the Continuity Clinic and Primary Care Pediatric Outpatient Department, including issues specific to care of the chronically ill child.

Use appropriately or be familiar with the following treatments and techniques in the Continuity Clinic and Pediatric Outpatient Department:

1. Universal precautions
2. Hand washing between patients
3. Isolation techniques
4. Administration of nebulized medication
5. Injury, wound and burn care
6. Oxygen delivery systems
7. Intramuscular, subcutaneous and intradermal injections

GOAL: Effectively and efficiently follow a panel of patients in continuity. The resident at the PL3 level should see at least 5 patients per session and have developed a panel of at least 150 continuity patients.

GOAL: Pediatric Competencies in Brief (Continuity Clinic/Outpatient): Demonstrate high standards of professional competence while working with patients in the continuity and outpatient setting.

Competency 1: Patient Care. Provide family-centered patient care that is development- and age-appropriate, compassionate, and effective for the treatment of health problems and the promotion of health.

Use a logical and appropriate clinical approach to the care of patients, applying principles of evidence-based decision-making and problem-solving. Generate a differential diagnosis and make a plan for how to determine the correct diagnosis.

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<p>Elicit subtle findings from the history and physical exam.</p> <p>Prioritize patient's problems. Manage multiple problems at once.</p>
<p>Provide sensitive support to patients and their families in the outpatient setting.</p> <p>Include the patient and family in medical decisions.</p>
<p>Provide effective preventive health care and anticipatory guidance to patients and families in continuity and outpatient settings.</p> <p>Learn to reason well in ambiguous situations.</p> <p>Monitor and follow up on patients appropriately.</p>
<p>Competency 2: Medical Knowledge. Understand the scope of established and evolving biomedical, clinical, epidemiological and social-behavioral knowledge needed by a pediatrician; demonstrate the ability to acquire, critically interpret and apply this knowledge in patient care.</p>
<p>Demonstrate a commitment to acquiring the knowledge needed for care of children in the continuity and general ambulatory setting.</p>
<p>Know and/or access written and electronic medical information efficiently, evaluate it critically, and apply it appropriately to outpatient care.</p> <p>Become aware of indications, contraindications and risks of commonly used medications and procedures.</p>
<p>Competency 3: Interpersonal Skills and Communication. Demonstrate interpersonal and communication skills that result in information exchange and partnering with patients, their families and professional associates.</p>
<p>Provide effective patient education, including reassurance, for conditions common to the outpatient setting.</p>
<p>Communicate effectively with physicians, other health professionals, and health-related agencies to create and sustain information exchange and teamwork for patient care.</p>
<p>Develop effective strategies for teaching students, colleagues and other professionals.</p>
<p>Maintain accurate, organized, legible, timely, and legally</p>

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<p>appropriate medical records in this clinical setting.</p>
<p>Competency 4: Practice-based Learning and Improvement. Demonstrate knowledge, skills and attitudes needed for continuous self-assessment, using scientific methods and evidence to investigate, evaluate, and improve one's patient care practice.</p>
<p>Identify standardized guidelines for diagnosis and treatment of conditions common to outpatient care, and adapt them to the individual needs of specific patients.</p>
<p>Work with health care team members to assess, coordinate, and improve patient care in the outpatient setting.</p>
<p>Establish an individual learning plan, systematically organize relevant information resources for future reference, and plan for continuing acquisition of knowledge and skills.</p> <p>Learn to identify limits of your own knowledge.</p> <p>Analyze your own practice patterns and compare them to those of others.</p>
<p>Competency 5: Professionalism. Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles and sensitivity to diversity.</p>
<p>Demonstrate personal accountability to the well being of patients (e.g., following-up lab results, writing comprehensive notes and seeking answers to patient care questions).</p>
<p>Establish trust and rapport with patients and staff.</p> <p>Demonstrate a commitment to professional behavior in interactions with staff and professional colleagues.</p>
<p>Adhere to ethical and legal principles and be sensitive to diversity.</p> <p>Acknowledge errors and work to minimize them in the future.</p> <p>Demonstrate initiative and leadership skills.</p>
<p>Competency 6: Systems-Based Practice. Understand how to practice high quality health care and advocate for patients within the context of the health care system.</p>
<p>Identify key aspects of health care systems as they apply to the</p>

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<p>primary care provider, such as the role of the PCP in decision-making, referral, and coordination of care.</p> <p>Function as a patient advocate.</p>
<p>Demonstrate sensitivity to the costs of clinical care in the outpatient setting, and take steps to minimize costs without compromising quality.</p>
<p>Recognize and advocate for families who need assistance to deal with system complexities, such as lack of insurance, multiple medication refills, multiple appointments with long transport times, or inconvenient hours of service.</p>
<p>Demonstrate the ability to adapt to change.</p> <p>Demonstrate knowledge of different types of medical practice and delivery systems.</p> <p>Practice effective allocation of health care resources, without compromising the quality of care.</p> <p>Recognize one's limits and those of the system; strive to avoid medical errors.</p>
<p>Procedures</p>
<p>GOAL: Technical and therapeutic procedures. Describe the following procedures, including how they work and when they should be used; perform those commonly used by pediatricians in practice.</p>
<p>Abscess: I & D of superficial abscesses</p>
<p>Bladder: catheterization</p>
<p>Conjunctival swab</p>
<p>Ear: cerumen removal</p>
<p>Foreign body removal (simple): nose, ear</p>
<p>Medication delivery: IM/SC/ID, IV, inhaled</p>
<p>PPD: placement</p>
<p>Pulse oximeter: placement</p>
<p>Rectal swab</p>
<p>Skin scraping</p>

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Sterile technique
Throat swab
Urethral swab
GOAL: Diagnostic and screening procedures. Describe the following tests or procedures, including how they work and when they should be used; competently perform those commonly used by the pediatrician in practice.
Developmental screening test
PPD: interpretation
Vision screening
Source Adapted from Kittredge, D., Baldwin, C. D., Bar-on, M. E., Beach, P. S., Trimm, R. F. (Eds.). (2004). APA Educational Guidelines for Pediatric Residency. Ambulatory Pediatric Association Website. Available online: www.ambpeds.org/egweb .