

SUBSPECIALTY ROTATION: WWAMI

1. GOAL: Health Promotion and Screening - The Well Child Visit

- a. Define family and identify significant family members and other significant caretakers and what role they play in the child's life.
- b. Identify patient and family concerns and prioritize visit agenda with patient and family.
- c. Discuss health goals for the visit with the patient and family.
- d. Elicit age-appropriate information regarding health, nutrition, activities, and health risks.
- e. Perform age-appropriate developmental surveillance, developmental screening, school performance monitoring and job performance monitoring.
- f. Identify risks to optimal developmental progress (e.g., prematurity, SES, family/genetic conditions, etc.).
- g. Perform standardized, validated, accurate developmental screening tests for infants and children until school age.
- h. Perform physical exam with special focus on age-dependent concerns and patient or family concerns.
- i. Order or perform and interpret additional age-appropriate screening procedure, using nationally-recognized periodicity schedules and local or state expectations:
 - i. newborn screening
 - ii. lead
 - iii. hematocrit
 - iv. hemoglobin for sickle cell
 - v. blood pressure
 - vi. cardiovascular risk assessment
 - vii. vision
 - viii. hearing
 - ix. dental assessment
 - x. reproductive-related concerns
- j. Order or perform appropriate additional screening procedures based on patient and family concerns:
 - i. sports involvement
 - ii. positive family history for specific health condition
 - iii. behavioral concerns
 - iv. depression
 - v. identified risk for lead exposure
- k. Perform age-appropriate immunizations using nationally-recognized periodicity schedules.
- l. 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, Bright Futures, GAPS). Address topics including:
 - i. Promotion of healthy habits (reading, physical activity)
 - ii. Injury and illness prevention
 - iii. Nutrition

- iv. Oral health
- v. Promotion of social competence
- vi. Promotion of positive parent/child interactions
- vii. Promotion of school achievement (when appropriate)
- viii. Sexuality
- ix. Prevention of substance use/abuse
- x. Interpretation of screening procedures
- xi. Prevention of violence
- m. Work collaboratively with professionals in the medical, mental-health, educational, and community system to optimize preventive health services for children.
- n. 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, questionnaires, patient education handouts, books, videos; develop office policies for such things as consent and confidentiality, request for transfer of medical records, school information).
- o. Discuss logistical barriers to the provision of health supervision care (e.g., financial, social, environmental, health service, insurance systems) and discuss strategies to overcome these for specific families.

2. GOAL: Evaluate and manage common signs and symptoms associated with the practice of pediatrics in the Pediatric Outpatient Department.

- a. Infancy
 - i. malpositioning of feet
 - ii. malrotation of lower extremities
 - iii. hip clicks
 - iv. skin rashes
 - v. birthmarks
 - vi. jitteriness
 - vii. hiccups
 - viii. sneezes
 - ix. wheezing
 - x. heart murmur
 - xi. vaginal bleeding and/or discharge
 - xii. foul smelling umbilical cord with/without discharge
 - xiii. undescended testicle, breast tissue, breast drainage
 - xiv. developmental delays
 - xv. sleep disturbances
 - xvi. difficulty feeding
 - xvii. dysconjugate gaze

- xviii. failure to thrive
- xix. frequent infections
- xx. abnormal head shape or size
- xxi. evidence of abuse or neglect
- xxii. abdominal masses
- xxiii. abnormal muscle tone

b. General

- i. acute life-threatening event (ALTE)
- ii. constitutional symptoms
- iii. excessive crying
- iv. failure to thrive
- v. fatigue
- vi. fever
- vii. weight loss or gain
- viii. dental caries
- ix. excessive thumb-sucking or pacifier use
- x. sleep disturbances
- xi. difficult behaviors
- xii. variations in appetite
- xiii. variations in toilet training
- xiv. overactivity
- xv. somatic complaints
- xvi. poor school performance
- xvii. attention problems
- xviii. fatigue
- xix. masturbation
- xx. anxiety
- xxi. violence

c. Cardiorespiratory

- i. apnea
- ii. chest pain
- iii. cough cyanosis
- iv. dyspnea
- v. heart murmur
- vi. hemoptysis
- vii. hypertension
- viii. inadequate respiratory effort

- ix. respiratory failure
- x. rhythm disturbance
- xi. shortness of breath
- xii. stridor
- xiii. syncope
- xiv. tachypnea
- xv. wheezing
- d. Dermatologic
 - i. congenital nevus and other birth marks
 - ii. ecchymoses
 - iii. edema
 - iv. paleness
 - v. petechiae
 - vi. pigmentary changes
 - vii. purpura
 - viii. rashes
 - ix. urticaria
 - x. vascular lesions
 - xi. foul smelling umbilical cord
- e. EENT
 - i. acute visual changes
 - ii. dysconjugate gaze
 - iii. conjunctival injection
 - iv. ear or eye discharge
 - v. ear, throat, eye pain
 - vi. edema
 - vii. epistaxis
 - viii. nasal foreign body
 - ix. hoarseness
 - x. stridor
- f. Endocrine
 - i. growth disturbance
 - ii. short stature
 - iii. heat or cold intolerance
 - iv. normal and abnormal timing of pubertal changes
 - v. polydipsia
 - vi. polyuria

- g. GI/Nutrition/Fluids
 - i. abdominal pain, mass, or distention
 - ii. ascites
 - iii. constipation
 - iv. dehydration
 - v. diarrhea
 - vi. dysphagia
 - vii. encopresis
 - viii. hematemesis
 - ix. inadequate intake of calories or fluid
 - x. jaundice
 - xi. melena
 - xii. obesity
 - xiii. rectal bleeding
 - xiv. regurgitation
 - xv. vomiting
- h. Genitourinary/Renal
 - i. change in urine color
 - ii. dysuria
 - iii. edema
 - iv. enuresis
 - v. frequency
 - vi. hematuria
 - vii. oliguria
 - viii. pain referable to the urinary tract
 - ix. scrotal mass
 - x. pain or edema
 - xi. trauma to urinary tract or external genitalia
 - xii. undescended testicle
- i. GYN
 - i. asymmetry of breast development
 - ii. abnormal vaginal bleeding
 - iii. pelvic or genital pain
 - iv. vaginal discharge or odor
 - v. vulvar trauma or erythema
 - vi. delayed onset of menses
 - vii. missed or irregular periods

- j. Hematologic/Oncologic
 - i. abnormal bleeding
 - ii. bruising
 - iii. hepatosplenomegaly
 - iv. lymphadenopathy
 - v. masses
 - vi. pallor
- k. Musculoskeletal
 - i. malpositioning of feet
 - ii. malpositioning of legs
 - iii. hip clicks
 - iv. abnormal gait
 - v. abnormal spine curvature
 - vi. arthritis or arthralgia
 - vii. bone and soft tissue trauma
 - viii. limb or joint pain
 - ix. limp
 - x. variations in alignment (e.g., intoeing)
- l. Neurologic
 - i. delays in developmental milestones
 - ii. ataxia
 - iii. change in sensorium
 - iv. diplopia
 - v. headache
 - vi. head trauma
 - vii. hearing concerns
 - viii. gait disturbance
 - ix. hypotonia
 - x. lethargy
 - xi. seizure
 - xii. tremor
 - xiii. vertigo
 - xiv. visual disturbance
 - xv. weakness
- m. Psychiatric/Psychosocial
 - i. acute psychosis
 - ii. anxiety

- iii. behavioral concerns
- iv. conversion symptoms
- v. depression
- vi. hyperactivity
- vii. suicide attempt
- viii. suspected child abuse or neglect

3. GOAL: Recognize and manage common childhood conditions presenting to the Continuity Clinic and Primary Care Pediatric Outpatient Department.

- a. Infancy
 - i. breast feeding
 - ii. bottle feeding
 - iii. colic
 - iv. congenital hip dislocation
 - v. constipation
 - vi. strabismus
 - vii. parent-infant interactional issues
 - viii. sleep problems
 - ix. child care decisions
 - x. separation protest
 - xi. stranger anxiety
 - xii. failure to thrive
 - xiii. recurrent respiratory and ear infections
 - xiv. positional foot deformities
 - xv. rashes
 - xvi. teething
 - xvii. injury prevention and safety
- b. General
 - i. Colic
 - ii. failure to thrive
 - iii. fever
 - iv. overweight
 - v. iron deficiency
 - vi. lead exposure
 - vii. strabismus
 - viii. hearing problems
 - ix. child care decisions

- x. well-child and well adolescent care (including anticipatory guidance)
- xi. parental issues
 - (1) financial stress
 - (2) divorce
 - (3) depression
 - (4) tobacco
 - (5) alcohol or substance abuse
 - (6) domestic violence
 - (7) inadequate support networks
- c. Allergy/Immunology
 - i. allergic rhinitis
 - ii. angioedema
 - iii. asthma
 - iv. food allergies
 - v. recurrent infections
 - vi. serum sickness
 - vii. urticaria
- d. Cardiovascular
 - i. bacterial endocarditis
 - ii. cardiomyopathy
 - iii. congenital heart disease (outpatient management of minor illnesses)
 - iv. congestive heart failure
 - v. heart murmurs
 - vi. Kawasaki disease
 - vii. Palpitations
 - viii. rheumatic fever
- e. Dermatology
 - i. abscess
 - ii. acne
 - iii. atopic dermatitis
 - iv. cellulitis and superficial skin infections
 - v. impetigo
 - vi. molluscum
 - vii. tinea infections
 - viii. viral exanthems
 - ix. verruca vulgaris
 - x. other common rashes of childhood and adolescence

- f. Endocrine/Metabolic
 - i. diabetes mellitus
 - ii. diabetes insipidus
 - iii. evaluation for possible hypothyroidism
 - iv. growth failure or delay
 - v. gynecomastia
 - vi. hyperthyroidism
 - vii. precocious or delayed puberty
- g. GI/Nutritional
 - i. appendicitis
 - ii. bleeding in stool
 - iii. constipation
 - iv. encopresis
 - v. foreign body ingestion
 - vi. gastroenteritis
 - vii. gastroesophageal reflux
 - viii. hepatitis
 - ix. inflammatory bowel disease
 - x. nutritional issues
 - xi. obesity
 - xii. pancreatitis
- h. GU/Renal
 - i. electrolyte and acid-base disturbances (mild)
 - ii. enuresis
 - iii. glomerulonephritis
 - iv. hematuria
 - v. Henoch Schonlein purpura
 - vi. nephrotic syndrome
 - vii. obstructive uropathy
 - viii. proteinuria
 - ix. undescended testicles
 - x. UTI/pyelonephritis
- i. Gynecologic
 - i. genital trauma (mild)
 - ii. labial adhesions
 - iii. pelvic inflammatory disease
 - iv. vaginal discharge or foreign body

- j. Hematology/Oncology
 - i. abdominal and mediastinal mass (initial work up)
 - ii. anemia
 - iii. hemoglobinopathies
 - iv. leukocytosis
 - v. neutropenia
 - vi. thrombocytopenia
- k. Infectious Disease
 - i. Cellulitis
 - ii. cervical adenitis
 - iii. dental abscess with complications
 - iv. initial evaluation and follow-up of serious, deep tissue infections
 - v. laryngotracheobronchitis
 - vi. otitis media
 - vii. periorbital and orbital cellulitis
 - viii. pharyngitis
 - ix. pneumonia (viral or bacterial)
 - x. sinusitis
 - xi. upper respiratory tract infections
 - xii. viral illness
 - xiii. recurrent infections
- l. Musculoskeletal
 - i. apophysitides
 - ii. femoral retro- and anteversion
 - iii. fractures
 - iv. growing pains
 - v. hip dysplasia
 - vi. limp
 - vii. metatarsus adductus
 - viii. sprains
 - ix. strains
 - x. tibial torsion
- m. Pharmacology/Toxicology
 - i. common drug poisoning or overdose
 - ii. ingestion avoidance (precautions)
- n. Neurology/Psychiatry
 - i. acute neurologic conditions (initial evaluation)

- ii. behavioral concerns
- iii. discipline issues
- iv. temper tantrums
- v. biting
- vi. developmental delay
- vii. seizures (evaluation and adjustment of medications)
- viii. ADHD
- ix. learning disabilities
- x. substance abuse
- o. Pulmonary
 - i. asthma
 - ii. bronchiolitis
 - iii. croup
 - iv. epiglottitis
 - v. pneumonia
 - vi. sinusitis
 - vii. tracheitis
 - viii. viral URI and LRI
- p. Surgery
 - i. initial evaluation of patients requiring urgent referral
 - ii. pre- and post-op evaluation of surgical patients
 - (1) general
 - (2) ENT
 - (3) Ortho
 - (4) Urology
 - (5) neurosurgical

4. GOAL: Utilize common diagnostic tests and imaging studies appropriately in the outpatient department with an eye to cost issues and interpretation of results in context of the specific patient. Includes ability to locate normal values and apply knowledge of test characteristics (specificity, positive predictive value, etc.).

- a. CBC with differential, platelet count, RBC indices
- b. Blood chemistries: electrolytes, glucose, calcium, magnesium, phosphate
- c. Hemoglobin A1C
- d. Cholesterol
- e. Renal function tests
- f. Tests of hepatic function (PT, albumin) and damage (liver enzymes, bilirubin)
- g. Serologic tests for infection (e.g., hepatitis, HIV)

- h. CRP, ESR
- i. Routine screening tests (e.g., neonatal screens, lead)
- j. Wet preps and skin scrapings for microscopic examination, including scotch tape test for pinworms
- k. Tests for ova and parasites
- l. Thyroid function tests
- m. Culture for bacterial, viral, and fungal pathogens, including stool culture
- n. Urinalysis
- o. Developmental, behavioral and depression screening tests
- p. Plain radiographs of the chest, extremities, abdomen, skull, sinuses
- q. CT, MRI, angiography, ultrasound, nuclear scans (interpretation not expected) and contrast studies when indicated
- r. Bone age films
- s. Electrocardiogram and echocardiogram
- t. Skin test for tuberculosis

5. GOAL: 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.

- a. Demonstrate understanding of the monitoring techniques and special treatments commonly used in the Continuity Clinic and Pediatric Outpatient Department including cardiac monitoring, pulse oximetry, repeated vital signs:
 - i. Discuss indications, contraindications and complications.
 - ii. Demonstrate proper use of technique or treatment for children of varying ages.
 - iii. Interpret results of monitoring based on method used, age and clinical situation.
- b. Use appropriately or be familiar with the following treatments and techniques in the Continuity Clinic and Pediatric Outpatient Department:
 - i. Universal precautions
 - ii. Hand washing between patients
 - iii. Isolation techniques
 - iv. Administration of nebulized medication
 - v. Injury, wound and burn care
 - vi. Oxygen delivery systems
 - vii. Intramuscular, subcutaneous and intradermal injections
- c. Recognize normal and abnormal findings at tracheostomy, gastrostomy, or central venous catheter sites, and demonstrate appropriate intervention or referral for problems encountered.
- d. Demonstrate skills for assessing and managing pain.
 - i. Use age-appropriate pain scales in assessment.
 - ii. Describe indications for and use of behavioral techniques and supportive care, and other non-pharmacologic methods of pain control.

6. GOAL: Demonstrate high standards of professional competence while working with patients in the continuity and outpatient setting.

- a. 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.
 - i. Use a logical and appropriate clinical approach to the care of outpatients, applying principles of evidence-based decision-making and problem-solving.
 - ii. Provide sensitive support to patients and their families in the outpatient setting.
 - iii. Provide effective preventive health care and anticipatory guidance to patients and families in continuity and outpatient settings.
- b. 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.
 - i. Demonstrate a commitment to acquiring the knowledge needed for care of children in the continuity and general ambulatory setting.
 - ii. Know and/or access medical information efficiently, evaluate it critically, and apply it appropriately to outpatient care.
- c. 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.
 - i. Provide effective patient education, including reassurance, for conditions common to the outpatient setting.
 - ii. Communicate effectively with physicians, other health professionals, and health-related agencies to create and sustain information exchange and teamwork for patient care.
 - iii. Develop effective strategies for teaching students, colleagues and other professionals.
 - iv. Maintain accurate, legible, timely, and legally appropriate medical records in this clinical setting.
- d. 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.
 - i. Identify standardized guidelines for diagnosis and treatment of conditions common to outpatient care, and adapt them to the individual needs of specific patients.
 - ii. Work with health care team members to assess, coordinate, and improve patient care in the outpatient setting.
 - iii. Establish an individual learning plan, systematically organize relevant information resources for future reference, and plan for continuing acquisition of knowledge and skills.
- e. Competency 5: Professionalism. Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles and sensitivity to diversity.
 - i. 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).
 - ii. Demonstrate a commitment to professional behavior in interactions with staff and professional colleagues.
 - iii. Adhere to ethical and legal principles and be sensitive to diversity.
- f. 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.

- i. Identify key aspects of health care systems (e.g., public and private insurance) as they apply to the primary care provider, such as the role of the PCP in decision-making, referral, and coordination of care.
- ii. Demonstrate sensitivity to the costs of clinical care in the outpatient setting, and take steps to minimize costs without compromising quality.
- iii. 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.
- iv. Recognize one's limits and those of the system; take steps to avoid medical errors.

PROCEDURES

1. **Technical and therapeutic procedures. Describe the following procedures, including how they work and when they should be used; competently perform those commonly used by the pediatrician in practice.**
 - a. Breast pump use
 - b. Medication delivery: IM/SC/ID
 - c. Medication delivery: inhaled
 - d. PPD: placement
 - e. Pulmonary function tests: peak flow meter

2. **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.**
 - a. ADHD home and school questionnaires
 - b. Behavioral screening questionnaire
 - c. Developmental screening test
 - d. Hearing screening
 - e. PPD: interpretation
 - f. Scoliosis, scoliometer
 - g. Tympanometry evaluation: interpretation
 - h. Vision screening

SOURCE

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. [Accessed 07/07/2005]. Project to develop this website was funded by the Josiah Macy, Jr. Foundation 2002-2005.

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