

AAFP Reprint No. 260

Recommended Curriculum Guidelines for Family Practice
Residents

Care of Infants and Children

(THE ITEMS IN BOLD ARE COVERED EVERY 18 MONTHS)**

Knowledge

In the appropriate setting, the resident should demonstrate the ability to apply knowledge of:

1. Fetal and neonatal period

- a. Risk factors determined by gestational age assessment
- b. Effects of labor and delivery on the infant
- c. Adaptations to extrauterine life
- d. Newborn metabolic screening
- e. Diagnosis and role-appropriate management of:
 - i. Meconium-stained amniotic fluid
 - ii. Perinatal asphyxia
 - iii. Respiratory distress
 - iv. Cyanosis
 - v. **Apnea/ALTEs**
 - vi. **Seizures**
 - vii. Hypoglycemia (Infant of Diabetic Mother)
 - viii. Evaluations of possible sepsis
 - ix. Developmental dysplastic hip
 - x. Birth-related injuries
 - xi. Neonatal abstinence syndrome (in utero drug exposure)
 - xii. Anemia
 - xiii. Rh factor and blood type incompatibility
 - xiv. Polycythemia
 - xv. **Jaundice**
 - xvi. Premature and post-date gestations
 - xvii. Maternal infections (Human immunodeficiency virus, hepatitis, etc.)

2. Well newborn and child care

- a. **Recommended schedule and content for examinations from birth to adolescence**
- b. **Anticipatory guidance appropriate to age and developmental stage**

- i. **Circumcision**
 - ii. **Feeding options and variations**
 - iii. **Temperament and behavior**
 - iv. **Developmental stages and milestones**
 - v. Developmental screening tests
 - vi. **Family and social relationships**
 - vii. **Effective parenting**
 - viii. **School readiness**
 - ix. Sleep problems
- 3. Physical and growth
 - a. **Feeding**
 - b. Growth and caloric requirements
 - c. **Normal growth and variants, including dental development**
- 4. **Prevention and screening**
 - a. Injury prevention
 - i. **Motorized vehicles**
 - ii. **Unmotorized vehicles** (e.g., bicycles, skates, skateboards, etc.)
 - iii. **Drowning**
 - iv. **Choking and asphyxiation**
 - v. **Poisoning**
 - vi. **Firearms**
 - vii. **Falls**
 - viii. **Burns and fire safety**
 - b. Child abuse
 - c. **Immunization**
 - d. Screening
 - i. **Anemia**
 - ii. **Lead**
 - iii. **Fluoride**
 - iv. High-risk children (**lipids**, TB, other infectious diseases)
 - v. Hypertension
 - vi. Other environmental health hazards
- 5. Sudden infant death syndrome (SIDS)
- 6. Psychological disorders
 - a. Recognize families with high risk for parent-child interaction, dysfunction or psychiatric problems
 - b. Evaluation, treatment and referral for:
 - i. **Feeding and elimination problems**
 - ii. **Eating disorders**
 - iii. Somatic and sleep disorders
 - iv. Obsessive-compulsive disorders
 - v. Mood disorders

- vi. Hyperactive, impulsive and inattentive behaviors
- vii. Conduct disorders
- 7. Social and ethical issues
 - a. Adoption
 - b. Divorce, separation and death
 - c. Impact of family violence, drug and alcohol abuse
 - d. Child abuse
 - e. Withholding and withdrawing life support
 - f. Nontraditional families

- 8. Genetics
 - a. Screening issues
 - b. Appropriate referral for necessary genetic diagnosis and counseling
- 9. Developmental disabilities
 - a. **Developmental delays**
 - b. Learning disorders
 - c. Chronic and preventative care for children who have special needs
- 10. Medical problems of infants and children: recognition, management and appropriate referral
 - a. Allergic
 - i. **Asthma**
 - ii. Atopy
 - iii. Allergic rhinitis
 - iv. **Food Allergies**
 - b. Inflammatory
 - i. Juvenile rheumatoid arthritis
 - ii. Vasculitis syndromes
 - iii. Kawasaki disease
 - iv. Henoch-Schönlein purpura
 - c. Renal and urologic
 - i. Glomerulonephritis
 - ii. Hematuria and proteinuria
 - iii. Urinary tract infections, including pyelonephritis
 - iv. Vesicoureteral reflux
 - v. Hypospadias, urethral prolapse, fused labia
 - vi. **Enuresis**
 - vii. Undescended testis
 - d. Endocrine/metabolic and nutritional problems
 - i. Thyroid disorders
 - ii. **Diabetes mellitus, type 1** and type 2
 - iii. **Obesity**
 - iv. Failure to thrive
 - v. Abnormal growth patterns (short and tall stature)

- e. Neurologic problems
 - i. Seizure disorders**
 - ii. Headache
 - iii. Syncope
 - iv. Psychomotor delay and cerebral palsy
 - v. Tics and movement disorders
- f. Common skin problems
 - i. Atopic dermatitis**
 - ii. Viral exanthema and enanthema**
 - iii. Bites and stings**
 - iv. Bacterial and fungal infections**
 - v. Lice and scabies**
 - vi. Diaper rash**
 - vii. Acne**
 - viii. Urticaria and erythema multiforme
 - ix. Burns
- g. Musculoskeletal problems
 - i. Clubfoot**
 - ii. Developmental dysplasia of the hip**
 - iii. Rotational problems and gait abnormalities**
 - 1). In- and out-toeing
 - 2). Metatarsus adductus
 - 3). Medial tibial torsion
 - 4). Femoral anteversion
 - iv. Scoliosis (idiopathic or acquired)**
 - v. Aseptic necrosis of the femoral head (Legg-Calvé Perthes disease)**
 - vi. Slipped capital femoral epiphysis**
 - vii. Common sprains, dislocations and fractures**
 - viii. Limping
- h. Gastrointestinal problems
 - i. Gastroenteritis (viral and bacterial)
 - ii. Constipation and encopresis**
 - iii. Hepatitis
 - iv. Colic
 - v. Gastroesophageal reflux
 - vi. Food intolerance and malabsorption
 - vii. Pyloric stenosis
 - viii. Intussusception
 - ix. Appendicitis and peritonitis
 - x. Recurrent and chronic abdominal pain
 - xi. Hernia
 - xii. Bilious emesis
 - xiii. Hematemesis

- xiv. Hematochezia
- i. Cardiovascular problems
 - i. Congenital heart disease and valvular disease**
 - ii. Evaluation of heart murmurs**
 - iii. Chest pain
 - iv. Hypertension
- j. Respiratory tract problems
 - i. Viral upper respiratory tract infections
 - ii. Reactive airway disease and asthma**
 - iii. Cystic fibrosis
 - iv. Bronchiolitis**
 - v. Foreign body aspiration
 - vi. Viral or bacterial pneumonia
 - vii. Pertussis
 - viii. Tonsillitis, pharyngitis, sinusitis
 - ix. Epiglottitis versus croup
 - x. Epistaxis
 - xi. Bacterial tracheitis
 - xii. Snoring
 - xiii. Obstructive sleep apnea
- k. Ear problems
 - i. Otitis media (acute and with effusion)**
 - ii. Otitis externa
 - iii. Hearing loss
 - iv. Wax and foreign body in ear canal
- l. Eye problems
 - i. Amblyopia
 - ii. Strabismus
 - iii. Lacrimal-duct stenosis
 - iv. Decreased visual acuity
 - v. The red eye
 - vi. Congenital cataracts
 - vii. Dacryocystitis
 - viii. Coloboma
- m. Other serious infections
 - i. Sepsis and sepsis syndromes
 - ii. Meningitis and encephalitis
 - iii. Invasive streptococcal and staphylococcal disease
 - iv. Osteomyelitis
 - v. Human immunodeficiency virus (HIV)
- n. Lymphatic problems
 - i. Reactive lymphadenopathy
 - ii. Cervical adenitis
- o. Childhood malignancies

- i. **Lymphoma**
- ii. **Neuroblastoma**
- iii. **Wilms' tumor**
- iv. **Leukemia**

Skills

In the appropriate setting, the resident should demonstrate the ability to independently

perform or appropriately refer:

1. Accurate Apgar score assignment
2. **Resuscitation of newborns, infants and children**
3. **Age-appropriate history and physical examination, including use of growth charts, with proper documentation**
4. Developmental screening tests administration and interpretation
5. Appropriate history and physical examination for physical or sexual abuse
6. **Behavior questionnaires for parent or teacher assessment of attention/deficit problems (including interpretation)-Behavioral Rotation**
7. Hearing and vision screening test interpretation
8. Pneumatic otoscopy and tympanograms (including interpretation)
9. Bladder catheterization and suprapubic aspiration
10. Vascular access (emergency and elective)
11. Lumbar puncture
12. **Calculation of maintenance and replacement fluid and electrolyte requirements**
13. **Coordination of patient care and specialty services when required**
14. Intraosseous line placement
15. Conscious sedation
16. Suture lacerations
17. Splint and cast