CARE OF INFANTS AND CHILDREN

WEB RESOURCES:
- The Red Book (Report of the committee on infectious diseases): [http://online.statref.com/TOC/TOC.aspx?FxId=76&SessionId=889E0BYRBVWWEZSH](http://online.statref.com/TOC/TOC.aspx?FxId=76&SessionId=889E0BYRBVWWEZSH)

PATIENT CARE
Family Medicine residents are expected to
- Develop knowledge and skills necessary to manage the medical, physical, social and emotional problems of infants, children and adolescents.
- Provide care for infants, children and adolescents in the context of the family.
- Monitor the development of each child to help realize his/her full potential, and to improve the health of children and families in the community in a proactive and responsive manner.
- Promote healthy lifestyles in children and families.
- Recognize the impact of social, cultural and environmental factors that affect the health and well-being of infants and children.

PGY1:
At the PGY1 level, residents will be expected to demonstrate skills in data gathering and organization, basic medical knowledge, clinical insight, and critical thinking. At the conclusion of this year, residents will be expected to have acquired enough skills to prioritize clinical problems, assume a team leadership role, and institute initial management of common acute clinical conditions.

- Pediatric Inpatient and Nursery: conditions common to the fetal and neonatal period
- Pediatric Urgent Care rotation: evaluation and management of common acute conditions in infants, children and adolescents
- Continuity Practice: well child care, including screening and prevention; initial management of and appropriate referral for acute and chronic conditions in infants, children and adolescents

PGY2, PGY3:
At the PGY2 and PGY3 levels, residents will be expected to make some independent decisions based on previous clinical experiences. Residents will be expected to demonstrate the ability to recognize and manage clinical scenarios not previously encountered and institute initial management of most acute clinical conditions, including prompt consultation and appropriate co-management when indicated. They will also be expected to effectively supervise junior residents and medical students in the initial evaluation of patients and in the provision of daily patient care in order to maximize patient safety and educational opportunities.

- Acute care in FHC and Pediatric Urgent Care rotation: evaluation and management of common acute conditions in infants, children and adolescents
- Continuity Practice: well child care, including screening and prevention; initial management of and appropriate referral for acute and chronic conditions in infants, children and adolescents

At the PGY3 level, residents will further demonstrate mastery of a large set of special skills and will demonstrate the ability to practice independently.

Procedures:
- Performance of specific procedures and interpretation of results
  - APGAR scores assignment
  - Developmental screening tests
  - Behavior questionnaires for parent/teacher assessment of attention/deficit problems
  - Hearing and vision screening tests
• Performance of and documentation age-appropriate history and physical examination, including use of growth charts
• Resuscitation of newborns, infants and children
• Calculation of maintenance and replacement fluid and electrolyte requirements
• Urethral catheterization
• Blood draw
• Placement of intravenous line
• Arterial blood gas
• Lumbar puncture

MEDICAL KNOWLEDGE:

Pediatric Inpatient (PGY1)
Residents will be expected to evaluate and initially manage:
• Asthma exacerbation
• Bronchiolitis
• Pre- and post-operative care
  o Fracture
  o Trauma
  o Appendicitis/Appendectomy
  o Tonsillectomy and Adenoidectomy
• Hyperbilirubinemia
• Infections
  o Cellulitis, skin infections
  o Abscess
  o Sepsis and sepsis syndromes
  o Meningitis, encephalitis
  o Invasive streptococcal and staphylococcal disease
  o Osteomyelitis
  o Human immunodeficiency virus

Nursery (PGY1)
Residents will be expected to evaluate and initially manage conditions common to the fetal and neonatal period:
• Risk factors determined by gestational age assessment
• Effects of labor and delivery on the infant and adaptations to extrauterine life
• Meconium-stained amniotic fluid
• Perinatal asphyxia
• Respiratory distress
• Cyanosis
• Apnea
• Seizures
• Hypoglycemia
• Evaluation for possible sepsis
• Developmental dysplastic hip
• Birth-related injuries
• Anemia
• Rh and blood type incompatibility
• Polycythemia
• Jaundice
• Premature and post-date gestations
• Maternal infections (HIV, Hepatitis, etc.)
• Congenital cataracts
• Prevention of sudden infant death syndrome

Pediatric Urgent Care, FHC Urgent Care and FHC Continuity Care (PGY1, PGY2, PGY3)
• Well newborn and child care
• Recommended schedule and content for examinations: birth to adolescence
• Anticipatory guidance appropriate to age and developmental stage
  • Circumcision
- Feeding options and variations
- Temperament and behavior
- Developmental stages and milestones
- Family relationships and effective parenting
- School readiness

- Physical growth
  - Feeding, growth and caloric requirements
  - Normal growth and variants including dental development

- Prevention and Screening
  - Injury prevention
    - Motorized vehicles
    - Unmotorized vehicles (e.g., bicycles, skates, skateboards, etc.)
    - Drowning
    - Choking/asphyxiation
    - Poisoning
    - School violence and bullying
    - Firearms
    - Falls
    - Burns and fire safety
  - Immunization
  - Screening
    - Anemia
    - Lead
    - Fluoride
    - High-risk children (lipids, TB, other infectious diseases)
    - Hypertension
    - Other environmental health hazards

- Psychological disorders
  - Families at risk for psychiatric problems
  - Evaluation, treatment and referrals for:
    - Feeding and elimination problems
    - Eating disorders
    - Somatic and sleep disorders
    - Obsessive-compulsive disorders
    - Mood disorders
    - Hyperactive/impulsive and inattentive behaviors
    - Conduct disorders

- Social and ethical issues
  - Adoption
  - Divorce, separation and death
  - Impact of family violence, drug and alcohol abuse
  - Child abuse
  - Family structure and definition

- Genetics: appropriate referral for genetic screening and counseling
- Developmental disabilities, developmental delays, and learning disorders
- Medical problems of infants and children: recognition, management and appropriate referrals
  - Allergic: Asthma, Atopy, Allergic rhinitis
  - Inflammatory: Juvenile rheumatoid arthritis, Vasculitis syndromes
  - Renal/urologic
    - Glomerulonephritis
    - Hematuria/Proteinuria
    - Urinary tract infections, including Pyelonephritis
    - Vesicoureteral reflux
    - Hypospadias, urethral prolapse, fused labia
    - Enuresis
    - Undescended testes
  - Endocrine/metabolic and nutritional problems
    - Thyroid disorders
• Diabetes mellitus, type 1 and type 2
• Obesity
• Failure to thrive
• Abnormal growth patterns: short and tall stature

▪ Neurologic problems
  • Seizure disorders
  • Headache
  • Syncope
  • Psychomotor delay/cerebral palsy
  • Tic and movement disorders

▪ Common skin conditions
  • Atopic dermatitis
  • Viral exanthems and enanthems
  • Bites and stings
  • Bacterial and fungal infections
  • Lice and scabies
  • Diaper rash
  • Acne
  • Urticaria and erythema multiforme
  • Burns

▪ Musculoskeletal:
  • Developmental dysplasia of the hip
  • Rotational problems/gait abnormalities
    o In- and out-toeing
    o Metatarsus adductus
    o Medial tibial torsion
    o Femoral anteversion
  • Scoliosis, idiopathic or acquired
  • Aseptic necrosis of the femoral head (Legg-Calvé Perthes)
  • Slipped capital femoral epiphysis
  • Common sprains, dislocations and fractures
  • Limping

▪ Gastrointestinal
  • Gastroenteritis, viral and bacterial
  • Constipation/encopresis
  • Hepatitis
  • Colic
  • Gastroesophageal reflux
  • Food intolerance and malabsorption
  • Pyloric stenosis
  • Intussusception
  • Appendicitis/peritonitis
  • Recurrent/chronic abdominal pain
  • Hernias

▪ Cardiovascular
  • Congenital heart disease/valvular disease
  • Evaluation of heart murmurs
  • Chest pain
  • Hypertension

▪ Respiratory tract
  • Viral upper respiratory tract infections
  • Reactive airway disease/asthma
  • Cystic fibrosis
  • Bronchiolitis
  • Foreign body aspiration
  • Viral or bacterial pneumonia
  • Pertussis
  • Tonsillitis/pharyngitis/sinusitis
  • Epiglottitis versus croup
• Epistaxis
  • Ear
    • Otitis media, acute and with effusion
    • Otitis externa
    • Hearing loss
  • Eye
    • Amblyopia and Strabismus
    • Lacrimal - duct stenosis
    • Decreased visual acuity
    • The red eye

PRACTICE BASED LEARNING AND IMPROVEMENT
Residents will:
• Discuss common legal and ethical issues in the care of infants, children and adolescents
• Review their individual practice registries and ensure that infants, children and adolescents in their care receive indicated screening and preventive interventions

INTERPERSONAL AND COMMUNICATION SKILLS
Residents will:
• Plan and conduct family appointments and family meetings
• Communicate promptly and effectively with consultants to collaborate in the care of and co-management of patients
• Demonstrate team leadership and supervisory skills
• Provide constructive feedback to fellow residents and to attending physicians

PROFESSIONALISM
Residents will:
• Demonstrate collegial and respectful relationships with team members and ancillary staff
• Demonstrate respectful and compassionate care of patients and their families

SYSTEMS BASED PRACTICE
Residents will:
• Formulate a rational plan of investigation and management, including assessment of severity and need for immediate consultation and/or expert assistance
• Formulate a plan of management, investigation and need for expert advice with an awareness of the risks and costs of the investigation and the value of the information that will be obtained
• Describe of the role of consultants in relationship to primary care and collaborate with consultants in the care of infants, children and adolescents
• Manage and coordinate psychosocial and family issues, including hospitalization, discharge planning, and use of community resources