

## **Overall Program and Educational Goals Pediatric Residency Program**

Texas Tech Health Sciences Center Paul L. Foster School of Medicine

It is our belief that Pediatricians are responsible of promoting health, treating illness and preventing injuries in infants, children and teenagers. This effort is not just limited to the patient but involves the family and the community as well.

Our main goal is to teach our residents, throughout their three years of training in general pediatrics, to achieve, develop and carry out the appropriate care for the patient, obtain the medical knowledge, understand professionalism, communicate and building up strong patient-physician relationships. We want our residents to practice medicine utilizing all the resources to become experts in an increasingly complex medical system.

Our program will provide physicians with educational experiences to obtain the necessary knowledge, skills and attitudes to become well-rounded pediatricians, and will prepare residents to be competent general pediatricians able to provide comprehensive and coordinated care to a broad range of pediatric patients.

- The residency training in pediatrics will provide three years of consecutive training involving progressive responsibilities for patient care.
- All pediatric residents are expected to be prepared to take the Board Certifying Exam in the year of their graduation, and pass on first attempt. Residents will show progress towards meeting these goals by demonstrating continuous improvement on the yearly in-training exam offered by the American Board of Pediatrics

The residents will be trained in the competencies and skills needed to practice general pediatrics of high quality in the community.

Pediatric residents trained in the program will practice with humanism, cultural sensitivity and concern for the wellbeing of patients and their families and they will become advocates for the children.

- Residents will strive to create a sense of altruism and unselfish dedication to the care of children and service to the community.
- Residents will develop a long life desire to learn and improve

Our residents will function with other members of the health care team to create an environment of collegiality and will exercise a multi-disciplinary approach to the care of children.

- Residents will excel in providing leadership and advocacy for children in their communities.
- Residents will learn to teach, to become a member of a team and to critically analyze problems to find resolutions.

Finally, the expectation from our residents are many but it is our main desire to prepare Pediatricians who are not only excellent clinicians but caring human beings as well, and most of all to enjoy every moment of learning in an environment created toward their successful career.

Our educational goals are defined with the required six competencies in mind, to provide physicians with a complete training that will enable them to be competent Pediatricians.

#### Goal 1: Patient Care

- Patient care is the foundation of pediatric residency training. Residents will learn to effectively and compassionately treat health problems and promote healthy lifestyles. Residents will develop the knowledge, skills and attitudes necessary to practice family-centered and community-centered care.

#### Goal 2: Professionalism

- Residents trained in the program will demonstrate a commitment to carry out professional responsibilities, adhere to ethical principle, and show cultural sensitivity and concern for the wellbeing of patients, their families and their communities. Residents will strive to build a sense of altruism and unselfish dedication to the care of children and service to the community.

#### Goal 3: Communication Skills

- Residents will demonstrate interpersonal and communication skills that result in an effective information exchange with patients, their families, and other professional associates. Residents will work with other members of the health care team to create an environment of collegiality and will exercise a multi-disciplinary approach to the care of children.

#### Goal 4: Evidence Base Medicine

- The residency training will prepare physicians for careers as lifelong learners. Residents will be comfortable with evidence-based clinical care. This will allow them to integrate principles of clinical epidemiology with skills in medical informatics and therefore improve decision-making at the bedside.

#### Goal 5: Medical Knowledge

- The residency training will prepare physicians to not only excel as clinicians but will provide the basis for further training in any pediatric specialty and/or academia. Furthermore, it will prepare them to be role models and an important resource in any community where they eventually practice. Formal teaching usually occurs within the didactic curriculum, but most learning takes place within clinical experiences. Therefore this competence is closely linked with competence in patient care.

#### Goal 6: System-Based Practice

- We train our residents to demonstrate an awareness of and responsiveness to the larger context and system of health care and to recognize other resource so that they provide the best health care to their patients.

<b>Standard Rotation: Adolescent Medicine</b>	
<b>Primary Goals for this Rotation</b>	
<b>3.40 GOAL: Prevention, Screening and Counseling (Adolescent). Understand the role of the pediatrician in the prevention of adolescent health problems through screening, counseling and advocacy.</b>	
3.40.1 : Discuss and follow recommendations for the frequency, type and content of adolescent health care visits outlined by the Bright Futures, AAP Health Supervision Guidelines and GAPS guidelines, and describe the rationale behind these recommendations.	
<p>3.40.2 : Perform adolescent health maintenance visits, demonstrating ability to:</p> <ol style="list-style-type: none"> <li>1. Organize the visits appropriate for situation (e.g., individualization according to the adolescent's developmental level, social, cultural, spiritual/religious, national [immigrant] background, and family characteristics).</li> <li>2. Obtain and interpret a history from the adolescent's parent(s), including: concerns about the adolescent's health, past medical history, family history, psycho-social history, spiritual or religious history, academic performance, needs for anticipatory guidance, etc.</li> <li>3. Obtain and interpret a detailed, sensitive, and private history from the adolescent (assessing current health concerns, bio-psycho-social history, spiritual or religious history, and behaviors that may affect health).</li> <li>4. Be familiar with questionnaires (e.g., Initial and Periodic Adolescent Preventive Services Visit Forms developed as an adjunct to GAPS), trigger questions (e.g., from Bright Futures), and structured interview techniques (e.g., HEADSS; HEADSFIRST). Complete a sensitive and skillful physical examination of male and female adolescents and young adults.</li> <li>5. Counsel and provide patient education in a developmentally-appropriate manner, remaining respectful of the adolescent's needs and privacy.</li> </ol>	
3.40.3 : Discuss how to make the office environment suitable to serve this age group and provide education and counseling to both adolescents and their parents (e.g., discussion of office	

<p>consent and confidentiality policies for health visits and release of medical records, separate waiting rooms, extended hours, patient education methods).</p>	
<p>3.40.4 : Discuss and follow federal, state and local laws that apply to adolescent health care, such as consent for confidential services and release of medical records, times when confidentiality may be abrogated, refusal of medical care, contraception, access to abortion, mental health, STD and chemical dependence services.</p>	
<p>3.40.5 : Explain the differences in health supervision visits for adolescents with special needs, such as those with:</p> <ol style="list-style-type: none"> <li>1. Nontraditional living situations (e.g., detention centers, foster care, homeless)</li> <li>2. Chronic diseases (e.g., cystic fibrosis, mental retardation, diabetes)</li> <li>3. Financial, social, cultural or language barriers</li> </ol>	
<p>3.40.6 : Perform and interpret adolescent screening according to guidelines by experts in the field (e.g., AAP, Bright Futures and GAP), and demonstrate familiarity with indications and timing, including:</p> <ol style="list-style-type: none"> <li>1. Physical examination screens (e.g., cardiovascular disease or risk, nutritional risk, dental disease, musculoskeletal problems and pre-participation sports physicals, sexual maturity ratings, skin problems, sexually transmitted diseases, scoliosis [using scoliometer], thyroid disease)</li> <li>2. Psychosocial screening (e.g., school performance, mood disorders, tobacco and substance abuse, sexual risks, media use, other risk taking behaviors)</li> <li>3. Laboratory or procedural screens (e.g., hearing, vision, anemia, hyperlipidemia, tuberculosis)</li> </ol>	
<p>3.40.7 : Evaluate immunization status and administer indicated immunizations.</p>	
<p>3.40.8 : Identify, assess risks, and counsel adolescents and families in the context of health promotion and illness or problem care for common or important conditions according to recommended guidelines (e.g., AAP, Bright Futures and GAP). Example topics from these guidelines are: communication skills and self-esteem building; education and</p>	

career or vocational planning; injury and violence prevention; substance abuse; nutritional issues; pregnancy prevention; etc.).	
3.40.9 : Educate adolescents through demonstration and instruction to perform routine breast and testicular self-examination.	
3.40.10 : Help adolescents to use health services appropriately during their teens and guide them in their transition to adult care.	
3.40.11 : Empower adolescents to become increasingly responsible for their own health and well-being.	
3.40.12 : Describe ways to improve adolescent health and prevention services at the federal, state and/or local level.	
3.40.13 : Discuss advocacy strategies you might use to improve or prevent at least one adolescent health problem you see in your patient population.	
<b>3.41 GOAL: Normal Vs. Abnormal (Adolescent). Understand normal adolescent behavior, growth, development and physiology and recognize deviations from the norm.</b>	
3.41.1 : Recognize the wide range of normal patterns of physical growth and pubertal development during adolescence and appropriately counsel patients and their families about pubertal variations.	
3.41.2 : Describe the pathophysiology, evaluation and management of variations in growth patterns and pubertal changes, including indications for referral.	
3.41.3 : Recognize the range of normal psychosocial development in adolescents; the stages of development across early, mid and late adolescent years; and appropriately identify when behaviors lie outside the norm, requiring special intervention or referral.	
3.41.4 : Order and interpret clinical and laboratory tests to identify adolescent disease versus non-disease, taking into account physiologic values for adolescents at different stages of maturity.	
<b>3.42 GOAL: Undifferentiated Signs and Symptoms (Adolescent). Evaluate and manage common signs, symptoms and situations or risks in adolescents, recognizing when referral is indicated.</b>	

<p>3.42.1 : Develop a strategy to evaluate complaints in adolescents that may represent functional complaints or psychosocial problems.</p> <ol style="list-style-type: none"> <li>1. Recognize common patterns of functional complaints in adolescents (e.g., headaches, abdominal pain, fatigue, chest pains).</li> <li>2. Develop a sensitive, supportive approach to the evaluation of these concerns.</li> <li>3. Recognize characteristics in the adolescent's history or health course warranting further diagnostic tests versus watchful and supportive observation.</li> </ol>	
<p>3.42.2 : Evaluate and manage the following signs, symptoms, and common adolescent situations, recognizing which can be managed by the general pediatrician and which ought to be referred to an adolescent subspecialist or other subspecialist:</p> <ol style="list-style-type: none"> <li>1. Behavioral/psychiatric: school avoidance, absenteeism, truancy and drop out; poor school behavior; poor school performance; sleep disturbance; somatic complaints; social avoidance; parent-adolescent disagreements; concerns about peer pressure; bullied adolescent; overscheduled/extended adolescents; emotional and educational needs of pregnant adolescents and adolescent parents; emotional and educational needs of gifted adolescents; recurrent injuries suspicious of risk taking behavior or abuse, recent loss (e.g., death of friend, parent), anxiety, depression, social isolation, rushed or pushed adolescents</li> <li>2. Cardiovascular: chest pain, syncope, murmurs, IHSS, hypertension</li> <li>3. Dental: mouth and tooth pain or injury; painful or swollen gums or mucosa, TMJ and facial pain</li> <li>4. Dermatologic: rashes, hair loss, pigment changes, changing moles</li> <li>5. GI: acute and chronic abdominal pain, acute and chronic diarrhea, dyspepsia, vomiting, constipation</li> <li>6. Growth/endocrine: abnormalities in growth rate or puberty; thyroid enlargement</li> <li>7. GU/Nephrology: dysuria, frequency, scrotal swelling; scrotal pain, feared STD, sexual concerns or dysfunction in male, need for contraception in male</li> <li>8. GYN: missed, irregular or excessive vaginal bleeding;</li> </ol>	

<p>vaginal discharge or pain; feared STD; lower abdominal pains; feared pregnancy; sexual concerns or dysfunction in female; need for contraception in female, breast asymmetry; also describe findings on history that would initiate a pelvic exam</p> <ol style="list-style-type: none"> <li>9. Hematology/oncology: fatigue, anemia, swollen glands, fear of cancer</li> <li>10. Infections: fever with no obvious cause, lymphadenopathy, upper respiratory symptoms including sore throat and ear pain, deficient immunizations, objections to recommended immunizations</li> <li>11. Musculoskeletal/Sports medicine: back pain, limp, joint pains, minor injuries/pains, excessive/rapid muscular development in an athlete; missed periods in a female athlete</li> <li>12. Neurologic: headaches, dizziness, passing out, head injury, altered behavior</li> <li>13. Nutritional: Obesity, weight loss, unusual eating habits (vegan diet, alternative diets or food supplements, diet changes during sports training to enhance performance)</li> <li>14. Otolaryngology: recurrent nasal congestion or drip, large tonsils, persistent laryngitis, hearing loss</li> <li>15. Pulmonary: shortness of breath, wheezing, cough</li> </ol>	
<p><b>3.43 GOAL: Common Conditions Not Referred (Adolescent). Diagnose and manage common conditions in adolescents that generally do not require referral.</b></p>	
<p>3.43.1 : Recognize presenting symptoms, diagnose, describe the pathophysiology, and manage common presentations of the following conditions:</p> <ol style="list-style-type: none"> <li>1. Allergies: environmental and seasonal allergies</li> <li>2. Behavioral/psychiatric: mild cases of substance abuse (tobacco, alcohol, inhalant and illicit drugs), non-organic headaches, common migraines, mild to moderate Attention Deficit Hyperactivity Disorder (ADHD); mild manifestations of anxiety, mood and conduct disorders; chest pain related to anxiety</li> <li>3. Cardiovascular: risk for cardiovascular disease in adulthood, hyperlipidemia, hypertension, functional heart murmurs</li> <li>4. Dental: viral exanthems and aphthous ulcers</li> <li>5. Dermatologic: acne, viral exanthems, dermatophytoses, eczema, pityriasis rosea, contact</li> </ol>	



<p>dermatitis, seborrhea, urticaria, acanthosis nigricans, body art including piercings and tattoos, hirsutism</p> <ol style="list-style-type: none"> <li>6. Endocrine: thyroid disease, galactorrhea, hirsutism, non-pathologic short or tall stature, male gynecomastia, polycystic ovary syndrome (PCOS)</li> <li>7. Gastrointestinal: gastroesophageal reflux disease (GERD), mild gastritis, dyspepsia, peptic ulcer disease, rectal fissures, hemorrhoids, encopresis, constipation</li> <li>8. GU/ Nephrology: epididymitis, mild varicocele, UTI, proteinuria and hematuria, enuresis, urethritis</li> <li>9. GYN: dysmenorrhea, pre menstrual syndrome (PMS), mild dysfunctional uterine bleeding, amenorrhea, vaginitis, cervicitis, STDs, uncomplicated pelvic inflammatory disease (PID), pregnancy diagnosis, breast mass</li> <li>10. Hematology/oncology: iron deficiency anemia</li> <li>11. Infections: mononucleosis, strep throat, sinus infections, ear infections, common causes of infectious diarrhea and vomiting, mild cases of hepatitis</li> <li>12. Musculoskeletal/sports: kyphosis, scoliosis &lt; 20 degrees by Cobb angle on x-ray, Osgood-Schlatter Disease, patello-femoral syndrome, back pain due to minor musculoskeletal strain, costochondritis, mild overuse syndromes</li> <li>13. Neurologic: common seizure disorders, uncomplicated tics, migraine headaches</li> <li>14. Nutritional: exogenous obesity, pre-eating disorder behaviors, vegetarian diet</li> <li>15. Pulmonary: mild, moderate, and exercise induced asthma, respiratory tract infections</li> </ol>	
<p><b>3.44 GOAL: Conditions Generally Referred (Adolescent). Recognize, manage, and refer adolescent conditions that generally require consultation or referral.</b></p>	
<p>3.44.1 : Conduct the initial assessment, develop a differential diagnosis, initiate treatment and/or referral as appropriate of the following conditions that affect adolescents:</p> <ol style="list-style-type: none"> <li>1. Allergy/Immunology: severe allergic reactions (bee, food), immunodeficiency disorders</li> <li>2. Behavioral/psychiatric: anorexia nervosa, bulimia, chronic fatigue syndrome, moderate-severe depression, suicidal/homicidal ideation, learning disabilities, substance abuse including performance enhancing medications, obsessive compulsive disorder (OCD),</li> </ol>	

severe anxiety disorders, psychosis, conduct disorders, conversion reactions, drug overdoses

3. Cardiovascular: mitral valve prolapse, pathologic heart murmurs, refractory hypertension
4. Dental: abscess, caries, fractured or avulsed tooth, severe trauma to jaw and soft tissues, malocclusions
5. Dermatologic: cystic or nodular acne, psoriasis, alopecia, pyoderma, hydradenitis suppurativa, hirsutism
6. Endocrinology: thyroid disease, galactorrhea, hirsutism or virilism, abnormal growth, precocious and delayed puberty, diabetes mellitus types I and II, non-pathologic short or tall stature, Turner syndrome
7. Gastrointestinal: appendicitis, inflammatory bowel disease (IBD), refractory encopresis/constipation, irritable bowel syndrome
8. GU/Nephrology: nephrotic/nephrotic range proteinuria, testicular torsion, scrotal mass, moderate-severe varicocele, hydrocele, inguinal hernia, genitourinary trauma, obstructive uropathy, renal hypertension, chronic renal disease
9. GYN: pregnancy, ectopic pregnancy and other complications of pregnancy, amenorrhea of undetermined etiology, dysfunctional uterine bleeding, polycystic ovary syndrome, ovarian cysts, tumors and torsion, Bartholin's abscess, suspected endometritis, complicated PID, PAP smear abnormalities, persistent breast masses, breast mass, endometriosis, congenital mullerian anomalies, contraception in teens with chronic disease
10. Hematology/Oncology: hemoglobinopathies, bone marrow depression, cancer, clotting disorder, bleeding disorder
11. Infectious Disease: appendicitis, severe or unusual infections, HIV
12. Musculoskeletal: patellar dislocation, scoliosis > 20° by Cobb angle on x-ray, suspected bone tumors, fractures, refractory back pain, chronic joint pain
13. Neurologic: uncommon and difficult to control seizures, serious head injury or concussion, acute and chronic neurology conditions, severe headaches
14. Pulmonary: severe asthma, cystic fibrosis
15. Other: Celiac disease, juvenile rheumatoid arthritis (JRA), systemic lupus erythematosus (SLE), chromosomal abnormalities

3.44.2 : Work effectively with a wide range of health professionals who care for adolescents with health care issues.	
3.44.2.1 :Describe the role and general scope of practice of adolescent-trained specialists, general pediatricians, family practitioners, and other providers (e.g., gynecologist, behavioral health counselors, school staff) who are involved with the care of adolescents.	
3.44.2.2 :Recognize situations where adolescents benefit from the skills of professionals trained in the care of adolescents.	
3.44.2.3 :Advocate for the adolescent and his/her family to secure effective, coordinated care for the adolescent using appropriate resources in the community and health profession.	
3.44.3 : Maintain an interactive and supportive primary care relationship with adolescents and their specialty consultants when patients are referred for management of specific disorders.	
<b>3.48 GOAL: Pediatric Competencies in Brief (Adolescent). Demonstrate high standards of professional competence while working with adolescents. [For details see Pediatric Competencies.]</b>	
3.48.1 : 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.	
3.48.1.1 :Use a logical and appropriate clinical approach to the care of adolescents, applying principles of evidence-based decision-making and problem-solving.	
3.48.1.2 :Provide sensitive support to adolescents and their families in all clinical settings (outpatient, continuity, adolescent clinic, school and community settings, mental health services, inpatient hospital services).	
3.48.2 : 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.	
3.48.2.1 :Demonstrate a commitment to acquiring	

the base of knowledge needed for care of adolescents.	
3.48.2.2 :Know and/or access medical information efficiently, evaluate it critically, and apply it to adolescent care appropriately.	
<b>3.48.3 : 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.</b>	
3.48.3.1 :Communicate skillfully with adolescents and their families, using effective interview, counseling and patient education strategies.	
3.48.3.2 :Communicate effectively with physicians, other health professionals, and health-related agencies to create and sustain information exchange and teamwork for patient care.	
3.48.3.3 :Develop effective strategies for teaching students, colleagues, other professionals and laypersons.	
3.48.3.4 :Maintain accurate, legible, timely, confidential and legally appropriate medical records and consultation reports for adolescents in the outpatient and inpatient setting.	
<b>3.48.4 : 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.</b>	
3.48.4.1 :Identify standardized guidelines for diagnosis and treatment of conditions common to adolescents and adapt them to the individual needs of specific patients.	
3.48.4.2 :Use scientific methods and evidence to investigate, evaluate and improve one's patient care practice related to adolescents.	
3.48.4.3 :Identify individual learning needs, systematically organize relevant information resources for future reference, and plan for continuing acquisition of knowledge and skills related to adolescents.	

3.48.5 : Competency 5. Professionalism. Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles and sensitivity to diversity.	
3.48.5.1 :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).	
3.48.5.2 :Demonstrate a commitment to professional behavior in interactions with patients, staff and professional colleagues.	
3.48.5.3 :Adhere to ethical and legal principles of care; demonstrate appreciation of and understanding of issues pertinent to adolescents (treatment of minors, confidentiality, etc.).	
3.48.5.4 :Be sensitive to diversity and recognize one's own biases that may affect one's response to adolescents.	
3.48.6 : 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.	
3.48.6.1 :Identify key aspects of health care systems as they apply to care of adolescents and their families (e.g., challenges to access and continuity of care; factors affecting billing and reimbursement).	
3.48.6.2 :When providing care to adolescents in all clinical settings, consider cost and resource allocation without compromising quality of care.	
3.48.6.3 :Recognize and advocate for adolescents who need assistance to deal with health care system complexities.	
3.48.6.4 :Recognize the limits of one's knowledge and expertise and take steps to avoid medical errors.	
<b>Procedures</b>	
<b>7.1. GOAL: Technical and therapeutic procedures.</b> Describe the following procedures, including how they work and when they should be used; competently perform those commonly used by the pediatrician in practice.	
Genital wart treatment	

Gynecologic evaluation: postpubertal	
Urethral swab	
<b>7.2. GOAL: Diagnostic and screening procedures.</b> 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.	
Scoliosis, scoliometer	
<b>Source</b> 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: <a href="http://www.ambpeds.org/egweb">www.ambpeds.org/egweb</a> . [Accessed 09/20/2007]. Project to develop this website was funded by the Josiah Macy, Jr. Foundation 2002-2005.	

<b>Standard Rotation: Developmental and Behavioral Pediatrics</b>	
<b>Primary Goals for this Rotation</b>	
<b>3.26 GOAL: Prevention (Dev-Beh). Understand the role of the pediatrician in the prevention of developmental and behavioral problems in children.</b>	
3.26.1 : Describe the common prenatal influences that impair typical development.	
3.26.2 : Describe the common postnatal influences that impair typical development.	
3.26.3 : Describe the common environmental, social and family influences that promote optimal development and behavior of a child.	
3.26.4 : Describe the common environmental, social and family influences that interfere with the typical development and behavior of a child.	
3.26.5 : Refer patients at risk to appropriate early intervention services and specialists.	
3.26.6 : Advocate for patients with special developmental, behavioral, and educational needs.	
<b>3.27 GOAL: Normal vs. Abnormal (Dev-Beh). Develop a working knowledge of typical development and behavior for children and families and apply this knowledge in the clinical setting to differentiate normal from abnormal states.</b>	
3.27.1 : For each of the domains of child development:	
3.27.1.1 :Describe the spectrum of age-appropriate development and variations from typical for children from birth through adolescence.	
3.27.1.2 :Identify major theories of development.	
3.27.1.3 :Discuss how different developmental domains interact and influence one another at different stages of development.	
3.27.1.4 :Counsel families on the variations within typical development.	
3.27.1.5 :Identify "red flags" of abnormal development.	

<p>3.27.2 : Describe a child's typical progress in each of the following developmental domains, identify signs of abnormal development, and provide parents with counseling concerning:</p> <ol style="list-style-type: none"> <li>1. Cognitive skills</li> <li>2. Fine and gross motor skills</li> <li>3. Receptive and expressive language</li> <li>4. Social/emotional development</li> <li>5. Self-help and adaptive behaviors</li> </ol>	
<p>3.27.3 : For the common domains of child behavior:</p>	
<p>3.27.3.1 :Describe the spectrum of age-appropriate development and variations from typical for children from birth through adolescence.</p>	
<p>3.27.3.2 :Identify major theories of behavioral development.</p>	
<p>3.27.3.3 :Discuss how different developmental and behavioral domains interact and influence one another at different stages.</p>	
<p>3.27.3.4 :Counsel families on the variations within typical behavior.</p>	
<p>3.27.3.5 :Diagnose "red flags" of abnormal behavior.</p>	
<p>3.27.4 : Describe a child's typical progress in each of the following behavioral domains, identify signs of abnormal development, and provide parents with counseling concerning:</p> <ol style="list-style-type: none"> <li>1. Attachment (bonding)</li> <li>2. Autonomy</li> <li>3. Elimination</li> <li>4. Eating</li> <li>5. Sexuality</li> <li>6. Sleep</li> <li>7. Temperament</li> </ol>	
<p>3.27.5 : Counsel parents about typical parenting issues (related to child development, behavior, health and safety, family adjustment).</p>	
<p>3.27.6 : Diagnose and manage specific pediatric behavioral,</p>	



<p>developmental and medical problems using knowledge and insight about family development and family systems theory.</p>	
<p>3.27.7 : Recognize and differentiate between developmentally-appropriate coping strategies used by children and their families to contend with illness and medical interventions, and common ineffective coping strategies, including non-compliance.</p>	
<p>3.27.8 : Use standardized, validated and accurate developmental and behavioral screening instruments, plus skills in interview, exam and medical knowledge to identify patterns of atypical development, such as:</p> <ol style="list-style-type: none"> <li>1. ADHD home and school questionnaires (e.g., Vanderbilt, Connors)</li> <li>2. Behavioral screening questionnaire (e.g., Eyberg Child Behavior Inventory, Pediatric Symptom Check List, PEDS, ASQ-SE)</li> <li>3. Developmental screening tools reliant on parental report (e.g., ASQ, PEDS, CDIs)</li> <li>4. Developmental screening tools requiring direct elicitation and measurement of children's behavior (e.g. Brigance, Battelle, Bayley Infant Neurodevelopmental Screener, SWILS)</li> <li>5. Hearing screening (general, pure tone audiometry, otoacoustic emissions)</li> <li>6. Language screening</li> <li>7. Home and parent risk assessment tools to screen for social concerns, e.g., alcohol abuse, domestic violence, depression (e.g., Family Psychosocial Screen, Edinburgh Depression Inventory)</li> </ol>	
<p>3.27.9 : Select, perform and/or interpret appropriate clinical tests to establish a medical etiology of identified developmental and/or behavioral problems, such as:</p> <ol style="list-style-type: none"> <li>1. Blood tests to rule out organic or genetic conditions (such as thyroid function, lead screen, genetic testing, metabolic screening)</li> <li>2. Neuroimaging studies and others (such as head MRI)</li> </ol>	
<p>3.27.10 : Demonstrate familiarity with commonly used clinical and psychoeducational testing used by specialists to evaluate and monitor children with developmental and behavioral problems.</p>	

<ol style="list-style-type: none"> <li>1. Identify common measures of intelligence used with infants, preschool and school age children (e.g., WPPSI, WISC-III, K-ABC).</li> <li>2. Recognize common diagnostic measures of achievement, speech-language, and adaptive behavior (e.g., WRAT-R, Vineland Adaptive Behavior Scales, Preschool Language Scale-IV).</li> <li>3. Understand the meaning of quotients and percentiles, the range of possible scores, common averages and standard deviations.</li> <li>4. Know the scores typically observed in children with specific developmental conditions such as mental retardation, learning disabilities, giftedness, etc.</li> </ol>	
<p><b>3.28 GOAL: Anticipatory Guidance (Dev-Beh). Provide appropriate anticipatory guidance related to common developmental and behavioral issues.</b></p>	
<p>3.28.1 : Provide anticipatory guidance to parents about expected behaviors or milestones at a child's next developmental level.</p>	
<p>3.28.2 : Provide anticipatory guidance to families about developmental aspects of injury prevention, common behaviors (i.e., feeding), discipline, and child's approach to the physical exam and interview.</p>	
<p>3.28.3 : Provide anticipatory guidance, developmental promotion, and counseling for the following issues and problems:</p>	
<p>3.28.3.1 :Adoption</p>	
<p>3.28.3.2 :Children at risk due to poverty, abuse or neglect, etc.</p>	
<p>3.28.3.3 :Behavioral management and positive disciplinary techniques</p>	
<p>3.28.3.4 :Normal independence seeking and limit testing behaviors</p>	
<p>3.28.3.5 :Positive attention</p>	
<p>3.28.3.6 :Warnings and punishment</p>	
<p>3.28.3.7 :Day care</p>	

3.28.3.8 :Death of a family member	
3.28.3.9 :Developmental disabilities, including transition needs from infancy through adolescence and young adulthood	
3.28.3.10 :Divorce	
3.28.3.11 :Early intervention programs	
3.28.3.12 :Eating problems	
3.28.3.13 :Exposure to violence	
3.28.3.14 :Gifted children	
3.28.3.15 :Habits (thumb sucking and nail biting)	
3.28.3.16 :Typical sleep patterns	
3.28.3.17 :Parenting in a variety of settings, such as adoptive, foster, single parents, step or "blended" families, etc.	
3.28.3.18 :Peer relationships and social skills	
3.28.3.19 :Resiliency	
3.28.3.20 :School success and failure	
3.28.3.21 :Self-esteem	
3.28.3.22 :Sexuality (typical patterns of sexual behavior, masturbation, sexual preference, sexually transmitted diseases, birth control)	
3.28.3.23 :Sibling rivalry	
3.28.3.24 :Sleep problems	
3.28.3.25 :Substance abuse	
3.28.3.26 :Television, video, computer and media	
3.28.3.27 :Toilet training	
3.28.3.28 :Preschool and kindergarten readiness	
3.28.3.29 :Study skills and home work assistance	
3.28.3.30 :Promoting speech and language development	

3.28.3.31 :Literacy promotion	
3.28.3.32 :Separation issues	
3.28.3.33 :Bullying	
<b>3.29 GOAL: Undifferentiated Signs and Symptoms (Dev-Beh). Evaluate and manage common developmental-behavioral signs and symptoms in infants, children, and adolescents.</b>	
3.29.1 : For developmental-behavioral signs and symptoms in infants, children, and adolescents:	
3.29.1.1 :Perform an appropriate problem-oriented interview and physical examination.	
3.29.1.2 :Obtain additional information from other related sources (e.g., day care, school).	
3.29.1.3 :Formulate a differential diagnosis, including typical variants where appropriate.	
3.29.1.4 :Use structured screening instruments as appropriate.	
3.29.1.5 :Formulate and carry out a plan for evaluation.	
3.29.1.6 :Develop a management plan with the patient and family.	
3.29.1.7 :Demonstrate effective communication to insure accurate history-taking, patient and family understanding, mutual decision-making, and adherence to therapy.	
3.29.1.8 :Provide appropriate follow-up, including case management, when multiple disciplines are involved.	
<p>3.29.2 : Evaluate and manage the following developmental-behavioral signs and symptoms, provide appropriate counseling to parents or patients, and identify appropriate referral resources:</p> <ol style="list-style-type: none"> <li>1. Inattention</li> <li>2. Hyperactivity</li> <li>3. Delay in a single developmental domain</li> <li>4. Delay in multiple developmental domains</li> <li>5. Sleep disturbances</li> <li>6. Elimination disturbances</li> <li>7. Feeding disturbances</li> </ol>	

<ol style="list-style-type: none"> <li>8. Poor academic performance</li> <li>9. Loss of developmental milestones</li> <li>10. Regression of behavioral self-control</li> <li>11. Excessive out-of-control behaviors (e.g., anger outbursts)</li> <li>12. Abrupt change in eating, sleeping, and/or socialization</li> <li>13. Anxiety</li> <li>14. Depressed affect</li> <li>15. Grief</li> <li>16. Sexual orientation issues</li> <li>17. Gender identity issues</li> <li>18. Somatic complaints</li> <li>19. Obsessive-compulsive symptoms</li> <li>20. Separation anxiety</li> <li>21. Tics</li> <li>22. Somatic complaints</li> <li>23. Violence</li> <li>24. Excessive concerns about body image</li> </ol>	
<p><b>3.30 GOAL: Common Conditions Not Referred (Dev-Beh). Recognize and manage common developmental and behavioral conditions that generally do not require referral.</b></p>	
<p>3.30.1 : For the common developmental-behavioral problems commonly observed in infants, children, and adolescents:</p>	
<p>3.30.1.1 :Describe diagnostic criteria, applying DSM-PC codes that determine variation, problem, or condition.</p>	
<p>3.30.1.2 :Discuss environmental and biologic risk factors.</p>	
<p>3.30.1.3 :Explain alternative or co-morbid conditions.</p>	
<p>3.30.1.4 :Describe natural history and common variations.</p>	
<p>3.30.1.5 :Implement assessment appropriate to the primary care setting, including input from home, school and other environments as necessary.</p>	
<p>3.30.1.6 :Implement individualized case management.</p>	
<p>3.30.1.7 :Counsel parents in age-appropriate intervention.</p>	
<p>3.30.1.8 :Describe indications for referral to other</p>	

professionals for evaluation or treatment.	
3.30.1.9 :Execute appropriate referrals to mental health and other professionals and other community resources.	
<p>3.30.2 : Recognize and manage, and counsel parents and patients concerning the following common developmental and behavioral problems that do not generally require referral:</p> <ol style="list-style-type: none"> <li>1. Adjustment reactions</li> <li>2. Attention deficit hyperactivity disorder, uncomplicated</li> <li>3. Breath-holding spells</li> <li>4. Physiologic crying in infancy and colic</li> <li>5. Oppositional behavior</li> <li>6. Difficulties with parenting and discipline</li> <li>7. Encopresis</li> <li>8. Enuresis</li> <li>9. Failure to thrive</li> <li>10. Fears and anxiety</li> <li>11. Habits (nail biting, hair twirling, etc.)</li> <li>12. School avoidance/refusal</li> <li>13. Sleep-wake cycle disturbances</li> <li>14. Stress reactions</li> <li>15. Temper tantrums</li> <li>16. Head banging</li> <li>17. Simple motor tic</li> <li>18. Typical separation anxiety</li> <li>19. Functional pain</li> <li>20. Mild depression</li> </ol>	
<p><b>3.31 GOAL: Common Conditions Generally Referred (Dev-Beh). Recognize, provide initial management, appropriately refer, and provide primary care case management for common developmental or behavioral conditions that often need additional diagnostic and/or management support from other specialties or disciplines.</b></p>	
<p>3.31.1 : For the more complex developmental-behavioral problems that require referral for diagnostic or management support:</p> <ol style="list-style-type: none"> <li>1. Describe diagnostic criteria.</li> <li>2. Discuss environmental and biologic risk factors.</li> <li>3. Identify alternative or co-morbid conditions.</li> <li>4. Describe natural history.</li> <li>5. Organize initial assessment, consultation, and ongoing</li> </ol>	

management as the primary care pediatrician.	
<p>3.31.2 : Recognize, provide initial management, appropriately refer and provide primary care case management for the following developmental-behavioral conditions:</p> <ol style="list-style-type: none"> <li>1. Developmental-behavioral disorders associated with chronic physical health conditions (e.g., spina bifida, cleft lip, cleft palate, paraplegia, amputation, sensory impairment, Tourette's disorder, prematurity)</li> <li>2. Cognitive disabilities (e.g., mental retardation)</li> <li>3. Language and learning disabilities</li> <li>4. Motor disabilities (e.g., cerebral palsy, muscular dystrophy)</li> <li>5. Autistic spectrum disorders</li> <li>6. Attention problems, moderate to severe</li> <li>7. Externalizing disorders (e.g., violence, conduct disorder, antisocial behavior, oppositional defiant disorder, school failure, school phobia, excessive school absences, firesetting)</li> <li>8. Internalizing disorders (e.g., adjustment disorder, anxiety disorder, conversion reactions, somatoform disorders, depression, mood disorders, suicide contemplation or attempt, PTSD)</li> <li>9. Substance abuse</li> <li>10. Social and environmental morbidities (e.g., physical abuse, sexual abuse, parental health disorders such as depression and substance abuse)</li> <li>11. Problems of feeding, eating, elimination, sleep</li> <li>12. Atypical behaviors (e.g., post traumatic stress disorder, psychosis)</li> <li>13. Problems of gender identity, sexuality, or related issues</li> <li>14. Psychosis/Schizophrenia, borderline personality</li> </ol>	
3.31.3 : Serve as case manager or active team participant for individuals with developmental and behavioral disorders through the primary care setting, demonstrating skills including, but not limited to:	
3.31.3.1 :Communication and record-sharing with other disciplines	
3.31.3.2 :Maintenance of a complete problem list	
3.31.3.3 :Managing the "whole patient"	

3.31.3.4 :Family empowerment and communication	
3.31.3.5 :Maintain patient and family confidentiality (HIPAA)	
<p>3.31.4 : Discuss interventions and specialists that assist with the diagnosis or ongoing management of children with developmental-behavioral disorders, demonstrate knowledge of referral sources, and demonstrate ability to work collaboratively with a variety of these professionals.</p> <ol style="list-style-type: none"> <li>1. Audiologist</li> <li>2. Behavior modification specialists</li> <li>3. Child Life</li> <li>4. Child psychiatry</li> <li>5. Child psychology</li> <li>6. Community resources/support systems (Boys and Girls club, Family Resource Centers)</li> <li>7. Developmental-behavioral pediatrician</li> <li>8. Early intervention services</li> <li>9. Educational intervention (preschool and school age)</li> <li>10. Family counseling</li> <li>11. Feeding specialists</li> <li>12. Hypnosis, relaxation, and self-control techniques</li> <li>13. Interdisciplinary team for evaluation</li> <li>14. Neurodevelopmental pediatrician</li> <li>15. Pediatric neurology</li> <li>16. Occupational therapy</li> <li>17. Physical therapy</li> <li>18. Physical medicine and rehabilitation</li> <li>19. Pharmacotherapy</li> <li>20. Social work services</li> <li>21. Speech and language therapy</li> <li>22. Teachers</li> <li>23. Vision specialist</li> <li>24. Other (play therapy, music therapy, support groups, parent training, etc.)</li> </ol>	
<p><b>3.39 GOAL: Pediatric Competencies in Brief (Dev-Beh). Demonstrate high standards of professional competence while working with children who present with developmental and behavioral concerns. [For details see Pediatric Competencies.]</b></p>	
3.39.1 : 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.	



<p>3.39.1.1 :Use a logical and appropriate clinical approach to the care of children who present with developmental and behavioral concerns, applying principles of evidence-based decision-making and problem-solving.</p>	
<p>3.39.1.2 :Provide sensitive support to children who present with developmental and behavioral concerns, and their families.</p>	
<p><b>3.39.2 : Competency 2: Medical Knowledge.</b> 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>3.39.2.1 :Demonstrate a commitment to acquiring the knowledge needed in developmental and behavioral pediatrics.</p>	
<p>3.39.2.2 :Know and/or access medical information efficiently, evaluate it critically, and apply it appropriately to care of children and families dealing with developmental and behavioral concerns.</p>	
<p><b>3.39.3 : Competency 3: Interpersonal Skills and Communication.</b> Demonstrate interpersonal and communication skills that result in information exchange and partnering with patients, their families and professional associates.</p>	
<p>3.39.3.1 :Communicate skillfully with families and children and provide appropriate patient education and reassurance for conditions common to developmental and behavioral pediatrics.</p>	
<p>3.39.3.2 :Communicate effectively with physicians, other health professionals, and health-related agencies to create and sustain information exchange and teamwork for patient care.</p>	
<p>3.39.3.3 :Maintain accurate, legible, timely, confidential and legally appropriate medical records in this clinical setting.</p>	
<p><b>3.39.4 : Competency 4: Practice-based Learning and Improvement.</b> Demonstrate knowledge, skills and attitudes needed for continuous self-assessment, using scientific methods and evidence to investigate, evaluate, and improve</p>	

one's patient care practice.	
3.39.4.1 :Use scientific methods and evidence to investigate, evaluate, and improve patient care practice related to developmental and behavioral issues.	
3.39.4.2 :Identify personal learning needs, systematically organize relevant information resources for future reference, and plan for continuing acquisition of knowledge and skills.	
<b>3.39.5 : Competency 5: Professionalism. Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to diversity.</b>	
3.39.5.1 :Demonstrate personal accountability to the well-being of patients (e.g., following-up on lab results, writing comprehensive notes, and seeking answers to patient care questions).	
3.39.5.2 :Demonstrate a commitment to professional behavior in interactions with staff and professional colleagues.	
3.39.5.3 :Adhere to ethical and legal principles, and be sensitive to diversity.	
<b>3.39.6 : 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.</b>	
3.39.6.1 :Identify key aspects of health care systems as they apply to care of individuals and their families dealing with mental health, behavioral or developmental concerns, including cost control, billing, and reimbursement.	
3.39.6.2 :Demonstrate sensitivity to the costs of clinical care for patients who present with developmental or behavioral concerns, and take steps to minimize costs without compromising quality.	
3.39.6.3 :Recognize and advocate for families who need assistance to deal with system complexities and identify resources to meet their needs.	
3.39.6.4 :Recognize the limits of one's knowledge and expertise and take steps to avoid medical errors.	
<b>Procedures</b>	

<p><b>7.2. GOAL: Diagnostic and screening procedures.</b> 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.</p>	
<p>ADHD home and school questionnaires</p>	
<p>Audiometry evaluation: interpretation</p>	
<p>Behavioral screening questionnaire</p>	
<p>Developmental screening test</p>	
<p>Hearing screening</p>	
<p>Language screening test</p>	
<p>Vision screening</p>	
<p><b>Source</b></p> <p>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: <a href="http://www.ambpeds.org/egweb">www.ambpeds.org/egweb</a>. [Accessed 09/26/2007]. Project to develop this website was funded by the Josiah Macy, Jr. Foundation 2002-2005.</p>	

**Resident Curriculum  
PL-1  
Clinic/Outpatient**

**The PL-1 clinical experience is focused on the special learning needs of the pediatric intern. The intern should be allowed to gain experience in the health supervision care of all ages of the pediatric patient and also in common childhood illnesses.**

**This experience is gained under the direct supervision of Faculty.**

**The PL-1 level resident is expected to see 4-6 patients in a half day session.**

**The PL-1 level resident is expected to take a comprehensive history, a thorough physical exam and are expected to develop their own differential diagnosis and management plans.**

**It is anticipated that they will need substantial guidance in the development of the six competencies.**

**Patient Care**

The competency of patient care includes:

- communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families
- gather essential and accurate information about their patients
- make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
- develop and carry out patient management plans counsel and educate patients and their families
- use information technology to support patient care decisions and patient education
- perform competently all medical and invasive procedures considered essential for the area of practice
- provide health care services aimed at preventing health problems or maintaining health
- work with health care professionals, including those from other disciplines, to provide patient- focused care

## **Patient Care: Goals and Objectives**

**Goal #1: Evaluate and manage common signs and symptoms associated with the practice of pediatrics in the Continuity Clinic and Primary Care Pediatric Outpatient Department.**

### **Objectives:**

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

- infancy, 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
- General: constitutional symptoms, excessive crying, failure to thrive, fatigue, fever, weight loss or gain,
- dental caries,
- excessive thumb-sucking or pacifier use,
- difficult behaviors, variations in appetite,
- variations in toilet training,
- overactivity, somatic complaints, poor school performance, attention problems, fatigue,
- masturbation,
- anxiety, violence
- Cardiorespiratory, syncope, tachypnea, wheezing
- Dermatologic: Congenital nevus and other birth marks, pigmentary changes,
- rashes,
- urticaria
- vascular lesions,
- foul smelling umbilical cord
- EENT: conjunctival injection;
- ear or eye discharge;
- ear, throat, eye pain,
- epistaxis;
- GYN: Asymmetry of breast development,
- abnormal vaginal bleeding, pelvic or genital pain,
- vaginal discharge or odor; or erythema,
- delayed onset of menses, missed or irregular periods
- Musculoskeletal: Malpositioning of feet, malpositioning of legs
- hip clicks,
- abnormal gait, abnormal
- spine curvature,
- arthritis or arthralgia,
- bone and soft tissue trauma,
- limb or joint pain,
- limp,
- variations in alignment (e.g., intoeing)

**Goal #2: Recognize and manage common childhood conditions presenting to the Continuity Clinic**

## and Primary Care Pediatric Outpatient Department

**Objectives:** #1. Evaluate and manage the common conditions and situations presenting in the context of health promotion visits.

- infancy: Breast feeding, bottle feeding,
- colic,
- congenital hip dislocation,
- constipation,
- strabismus,
- 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
- General: Colic,
- failure to thrive,
- fever,
- overweight,
- iron deficiency,
- lead exposure,
- 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)
- Dermatology: abscess,
- acne,
- atopic dermatitis,
- cellulitis and superficial skin infections, impetigo,
- molluscum,
- tinea infections,
- viral exanthems,
- verruca vulgaris, other common
- rashes of childhood and adolescence
- constipation, encopresis,
- Gynecologic), labial adhesions, pelvic inflammatory disease, vaginal discharge or
- infectious Disease: Cellulitis,
- cervical adenitis,
- dental abscess with
- complications, otitis media,
- pharyngitis, sinusitis,

- upper respiratory tract infections,
- viral illness,
- recurrent infections
- musculoskeletal: apophysitides, femoral retro- and anteversion,
- fractures,
- growing pains
- , hip dysplasia,
- limp, metatarsus
- adductus, sprains,
- strains, tibial torsion
- Neurology/Psychiatry: Acute neurologic conditions (initial evaluation), behavioral concerns, discipline issues, temper tantrums, biting, developmental delay, seizures (evaluation and adjustment of medications), ADHD, learning disabilities, substance abuse
- Surgery: Initial evaluation of patients requiring urgent referral, pre- and post-op evaluation of surgical patients (general, ENT, ortho, urology, neurosurgical, etc.)

**Goal #3: 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**

**Objectives:**

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

#2 Perform a family centered health supervision interview.

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

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

Identify risks to optimal developmental progress (e.g., prematurity, SES, family/genetic conditions, etc.).

Identify patient and parental concerns regarding development, school, and/or work.

Perform standardized, validated, accurate developmental screening tests for infants and children until school age.

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

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

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

#7 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).

#8 Perform age-appropriate immunizations using nationally-recognized periodicity schedules.

#9 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:

- #10 Promotion of healthy habits (e.g., physical activity, reading, etc
- #11 Injury and illness prevention
- #12 Nutrition
- #13 Oral health
- #14 Age-appropriate medical care
- #15 Promotion of social competence
- #16 Promotion of positive interactions between the parent and infant/child/adolescent
- #17 Promotion of constructive family communication, relationships and parental health
- #18 Promotion of community interactions
- #19 Promotion of responsibility (adolescence)
- #20 Promotion of school achievement (middle childhood, adolescence)
- #21 Sexuality (infancy, early and middle childhood, adolescence)
- #22 Prevention of substance use/abuse (middle childhood, adolescence)
- #23 Physical activity and sports
- #24 Interpretation of screening procedures
- #25 Prevention of violence
- #26 Work collaboratively with professionals in the medical, mental-health, educational and community system to optimize preventive health services for children
- #27 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).
- #28 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

**Goal #4: Master the practice of pediatrics in the Continuity Clinic and Primary Care Pediatric Outpatient Department in the Light of the Six Competency Domains**

**Objectives:**

- #1 Evaluate and manage the signs and symptoms that present in the context of health care promotion.
- #2 Evaluate and manage the common conditions and situations presenting in the context of health promotion visits.
- #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.
- #7 Use appropriately the common laboratory studies in the Continuity Clinic and Outpatient setting:

- Hemaglobin A1C



- Cholesterol
- Serologic tests for infection (e.g., hepatitis, HIV)
- Wet preps and skin scrapings for microscopic examination, including scotch tape test for pinworms
- Thyroid function tests
- Developmental, behavioral and depression screening tests

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

**Goal #5: 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.**

**Objectives:** #1 Demonstrate understanding of the monitoring techniques and special treatments commonly used in the Continuity Clinic and Pediatric Outpatient Department:

- Discuss indications, contraindications and complications.
- Demonstrate proper use of technique or treatment for children of varying ages.
- Interpret results of monitoring based on method used, age and clinical situation.

#2 Appropriately use the monitoring techniques commonly used in the Continuity Clinic and Pediatric Outpatient Department:

- Cardiac monitoring
- Pulse oximetry
- Repeated assessment of temperature, heart rate, respiratory rate, blood pressure, as clinically indicated during an office visit

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

- Universal precautions
- Hand washing between patients
- Isolation techniques
- Administration of nebulized medication
- Injury, wound and burn care
- Oxygen delivery systems
- Intramuscular, subcutaneous and intradermal injections

#4 Recognize normal and abnormal findings at tracheostomy, gastrostomy, or central venous catheter sites, and demonstrate appropriate intervention or referral for problems encountered

#5 Demonstrate skills for assessing and managing pain.

- Use age-appropriate pain scales in assessment.
- Describe indications for and use of behavioral techniques and supportive care, and other non-pharmacologic methods of pain control

**Goal #6: Proficiency in technical and therapeutic procedures.**

**Objectives:**

#1 Be knowledgeable about the following procedures, including how they work and when they should be used; competently perform those commonly used by the pediatrician in practice:

- Breast pump use
- Medication delivery: IM/SC/ID
- Medication delivery: inhaled
- PPD: placement
- Pulmonary function tests: peak flow meter

#2 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:

- ADHD home and school questionnaires
- Behavioral screening questionnaire
- Developmental screening test
- Hearing screening
- PPD: interpretation
- Scoliosis, scoliometer
- Tympanometry evaluation: interpretation
- Vision screening

**Medical Knowledge**

The competency of Medical Knowledge includes:

- demonstrate an investigatory and analytic thinking approach to clinical situations
- know and apply the basic and clinically supportive sciences which are appropriate to their discipline

**Medical Knowledge: Goals and Objectives**

**Goal #1: Evaluate and manage common signs and symptoms associated with the practice of pediatrics in the Continuity Clinic and Primary Care Pediatric Outpatient Department.**

**Objectives:**

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

- infancy, 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
- General: constitutional symptoms, excessive crying, failure to thrive, fatigue, fever, weight loss or gain,
- dental caries,
- excessive thumb-sucking or pacifier use,

- difficult behaviors, variations in appetite,
- variations in toilet training,
- overactivity, somatic complaints, poor school performance, attention problems, fatigue,
- masturbation,
- anxiety, violence
- Cardiorespiratory, syncope, tachypnea, wheezing
- Dermatologic: Congenital nevus and other birth marks, pigmentary changes,
- rashes,
- urticaria
- vascular lesions,
- foul smelling umbilical cord
- EENT: conjunctival injection;
- ear or eye discharge;
- ear, throat, eye pain,
- epistaxis;
- GYN: Asymmetry of breast development,
- abnormal vaginal bleeding, pelvic or genital pain,
- vaginal discharge or odor; or erythema,
- delayed onset of menses, missed or irregular periods
- Musculoskeletal: Malpositioning of feet, malpositioning of legs
- hip clicks,
- abnormal gait, abnormal
- spine curvature,
- arthritis or arthralgia,
- bone and soft tissue trauma,
- limb or joint pain,
- limp,
- variations in alignment (e.g., intoeing)

**Goal #2: Recognize and manage common childhood conditions presenting to the Continuity Clinic and Primary Care Pediatric Outpatient Department**

**Objectives:**

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

- infancy: Breast feeding, bottle feeding,
- colic,
- congenital hip dislocation,
- constipation,
- strabismus,
- 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

- General: Colic,
- failure to thrive,
- fever,
- overweight,
- iron deficiency,
- lead exposure,
- 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)
- Dermatology: abscess,
- acne,
- atopic dermatitis,
- cellulitis and superficial skin infections, impetigo,
- molluscum,
- tinea infections,
- viral exanthems,
- verruca vulgaris, other common
- rashes of childhood and adolescence
- constipation, encopresis,
- Gynecologic), labial adhesions, pelvic inflammatory disease, vaginal discharge or
- infectious Disease: Cellulitis,
- cervical adenitis,
- dental abscess with
- complications, otitis media,
- pharyngitis, sinusitis,
- upper respiratory tract infections,
- viral illness,
- recurrent infections
- musculoskeletal: apophysitides, femoral retro- and anteversion,
- fractures,
- growing pains
- , hip dysplasia,
- limp, metatarsus
- adductus, sprains,
- strains, tibial torsion
- Neurology/Psychiatry: Acute neurologic conditions (initial evaluation), behavioral concerns, discipline issues, temper tantrums, biting, developmental delay, seizures (evaluation and adjustment of medications), ADHD, learning disabilities, substance abuse
- Surgery: Initial evaluation of patients requiring urgent referral, pre- and post-op evaluation of surgical patients (general, ENT, ortho, urology, neurosurgical, etc.)

**Goal #3: Utilize common diagnostic tests and imaging studies appropriately in the outpatient department**

**Objectives:**

#1 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 (lab studies).

#2 Recognize cost and utilization issues

#3 Interpret the results in the context of the specific patient

**Goal #4: 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**

**Objectives:**

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

#2 Perform a family centered health supervision interview.

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

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

Identify risks to optimal developmental progress (e.g., prematurity, SES, family/genetic conditions, etc.).

Identify patient and parental concerns regarding development, school, and/or work.

Perform standardized, validated, accurate developmental screening tests for infants and children until school age.

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

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

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

#7 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).

#8 Perform age-appropriate immunizations using nationally-recognized periodicity schedules.

#9 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:

#10 Promotion of healthy habits (e.g., physical activity, reading, etc)

#11 Injury and illness prevention

#12 Nutrition

#13 Oral health

#14 Age-appropriate medical care

#15 Promotion of social competence

#16 Promotion of positive interactions between the parent and infant/child/adolescent

#17 Promotion of constructive family communication, relationships and parental health

- #18 Promotion of community interactions
- #19 Promotion of responsibility (adolescence)
- #20 Promotion of school achievement (middle childhood, adolescence)
- #21 Sexuality (infancy, early and middle childhood, adolescence)
- #22 Prevention of substance use/abuse (middle childhood, adolescence)
- #23 Physical activity and sports
- #24 Interpretation of screening procedures
- #25 Prevention of violence
- #26 Work collaboratively with professionals in the medical, mental-health, educational and community system to optimize preventive health services for children
- #27 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).
- #28 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

**Goal #5: Master the practice of pediatrics in the Continuity Clinic and Primary Care Pediatric Outpatient Department in the Light of the Six Competency Domains**

**Objectives:**

- #1 Evaluate and manage the signs and symptoms that present in the context of health care promotion.
- #2 Evaluate and manage the common conditions and situations presenting in the context of health promotion visits.
- #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.
- #7 Use appropriately the common laboratory studies in the Continuity Clinic and Outpatient setting:
  - Hemoglobin A1C
  - Cholesterol
  - Serologic tests for infection (e.g., hepatitis, HIV)
  - Wet preps and skin scrapings for microscopic examination, including scotch tape test for pinworms
  - Thyroid function tests
  - Developmental, behavioral and depression screening tests
- #8 Use the common imaging, diagnostic or radiographic studies when indicated for patients evaluated in Continuity Clinic or the Outpatient Pediatric Clinic: Skin test for tuberculosis

**Goal #6: 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.**

**Objectives:**

#1 Demonstrate understanding of the monitoring techniques and special treatments commonly used in the Continuity Clinic and Pediatric Outpatient Department:

- Discuss indications, contraindications and complications.
- Demonstrate proper use of technique or treatment for children of varying ages.
- Interpret results of monitoring based on method used, age and clinical situation.

#2 Appropriately use the monitoring techniques commonly used in the Continuity Clinic and Pediatric Outpatient Department:

- Cardiac monitoring
- Pulse oximetry
- Repeated assessment of temperature, heart rate, respiratory rate, blood pressure, as clinically indicated during an office visit

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

- Universal precautions
- Hand washing between patients
- Isolation techniques
- Administration of nebulized medication
- Injury, wound and burn care
- Oxygen delivery systems
- Intramuscular, subcutaneous and intradermal injections

#4 Recognize normal and abnormal findings at tracheostomy, gastrostomy, or central venous catheter sites, and demonstrate appropriate intervention or referral for problems encountered

#5 Demonstrate skills for assessing and managing pain.

- Use age-appropriate pain scales in assessment.
- Describe indications for and use of behavioral techniques and supportive care, and other non-pharmacologic methods of pain control

**Goal #7: Proficiency in technical and therapeutic procedures.**

**Objectives:**

#1 Be knowledgeable about the following procedures, including how they work and when they should be used; competently perform those commonly used by the pediatrician in practice:

- Breast pump use
- Medication delivery: IM/SC/ID
- Medication delivery: inhaled
- PPD: placement
- Pulmonary function tests: peak flow meter

#2 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:

- ADHD home and school questionnaires
- Behavioral screening questionnaire
- Developmental screening test
- Hearing screening
- PPD: interpretation
- Scoliosis, scoliometer
- Tympanometry evaluation: interpretation
- Vision screening

## **Practice- Based Learning and Improvement**

The competency of Practice- Based Learning and Improvement includes:

- analyze practice experience and perform practice-based improvement activities using a systematic methodology
- locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems
- obtain and use information about their own population of patients and the larger population from which their patients are drawn
- apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness
- use information technology to manage information, access on-line medical information; and support their own education
- facilitate the learning of students and other health care professionals

## **Practice- Based Learning and Improvement :Goals and Objectives**

**Goal #1: Master the practice of pediatrics in the Continuity Clinic and Primary Care Pediatric Outpatient Department in the Light of the Six Competency Domains**

**Objectives:**

#1 Evaluate and manage the signs and symptoms that present in the context of health care promotion.

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

#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.

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

- Hemoglobin A1C



- Cholesterol
- Serologic tests for infection (e.g., hepatitis, HIV)
- Wet preps and skin scrapings for microscopic examination, including scotch tape test for pinworms
- Thyroid function tests
- Developmental, behavioral and depression screening tests

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

**Goal #2: 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.**

**Objectives:**

#1 Demonstrate understanding of the monitoring techniques and special treatments commonly used in the Continuity Clinic and Pediatric Outpatient Department:

- Discuss indications, contraindications and complications.
- Demonstrate proper use of technique or treatment for children of varying ages.
- Interpret results of monitoring based on method used, age and clinical situation.

#2 Appropriately use the monitoring techniques commonly used in the Continuity Clinic and Pediatric Outpatient Department:

- Cardiac monitoring
- Pulse oximetry
- Repeated assessment of temperature, heart rate, respiratory rate, blood pressure, as clinically indicated during an office visit

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

- Universal precautions
- Hand washing between patients
- Isolation techniques
- Administration of nebulized medication
- Injury, wound and burn care
- Oxygen delivery systems
- Intramuscular, subcutaneous and intradermal injections

#4 Recognize normal and abnormal findings at tracheostomy, gastrostomy, or central venous catheter sites, and demonstrate appropriate intervention or referral for problems encountered

#5 Demonstrate skills for assessing and managing pain.

- Use age-appropriate pain scales in assessment.
- Describe indications for and use of behavioral techniques and supportive care, and other non-

pharmacologic methods of pain control

## **Professionalism**

The competency of Professionalism includes:

- demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development
- demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices
- demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities

## **Professionalism :Goals and Objectives**

**Goal #1: Evaluate and manage common signs and symptoms associated with the practice of pediatrics in the Continuity Clinic and Primary Care Pediatric Outpatient Department.**

### **Objectives:**

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

- infancy, 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
- General: constitutional symptoms, excessive crying, failure to thrive, fatigue, fever, weight loss or gain,
- dental caries,
- excessive thumb-sucking or pacifier use,
- difficult behaviors, variations in appetite,
- variations in toilet training,
- overactivity, somatic complaints, poor school performance, attention problems, fatigue,
- masturbation,
- anxiety, violence
- Cardiorespiratory, syncope, tachypnea, wheezing
- Dermatologic: Congenital nevus and other birth marks, pigmentary changes,
- rashes,
- urticaria
- vascular lesions,
- foul smelling umbilical cord
- EENT: conjunctival injection;
- ear or eye discharge;
- ear, throat, eye pain,
- epistaxis;
- GYN: Asymmetry of breast development,
- abnormal vaginal bleeding, pelvic or genital pain,

- vaginal discharge or odor; or erythema,
- delayed onset of menses, missed or irregular periods
- Musculoskeletal: Malpositioning of feet, malpositioning of legs
- hip clicks,
- abnormal gait, abnormal
- spine curvature,
- arthritis or arthralgia,
- bone and soft tissue trauma,
- limb or joint pain,
- limp,
- variations in alignment (e.g., intoeing)

**Goal #2: Recognize and manage common childhood conditions presenting to the Continuity Clinic and Primary Care Pediatric Outpatient Department**

**Objectives:**

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

- infancy: Breast feeding, bottle feeding,
- colic,
- congenital hip dislocation,
- constipation,
- strabismus,
- 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
- General: Colic,
- failure to thrive,
- fever,
- overweight,
- iron deficiency,
- lead exposure,
- 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)
- Dermatology: abscess,
- acne,

- atopic dermatitis,
- cellulitis and superficial skin infections, impetigo,
- molluscum,
- tinea infections,
- viral exanthems,
- verruca vulgaris, other common
- rashes of childhood and adolescence
- constipation, encopresis,
- Gynecologic), labial adhesions, pelvic inflammatory disease, vaginal discharge or
- infectious Disease: Cellulitis,
- cervical adenitis,
- dental abscess with
- complications, otitis media,
- pharyngitis, sinusitis,
- upper respiratory tract infections,
- viral illness,
- recurrent infections
- musculoskeletal: apophysitis, femoral retro- and anteversion,
- fractures,
- growing pains
- , hip dysplasia,
- limp, metatarsus
- adductus, sprains,
- strains, tibial torsion
- Neurology/Psychiatry: Acute neurologic conditions (initial evaluation), behavioral concerns, discipline issues, temper tantrums, biting, developmental delay, seizures (evaluation and adjustment of medications), ADHD, learning disabilities, substance abuse
- Surgery: Initial evaluation of patients requiring urgent referral, pre- and post-op evaluation of surgical patients (general, ENT, ortho, urology, neurosurgical, etc.)

**Goal #3: Utilize common diagnostic tests and imaging studies appropriately in the outpatient department**

**Objectives:**

#1 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 (lab studies).

#2 Recognize cost and utilization issues

#3 Interpret the results in the context of the specific patient

**Goal #4: 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**

**Objectives:**

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

#2 Perform a family centered health supervision interview.

- Define family and identify significant family members and other significant caretakers and what role they play in the child's life.
- Identify patient and family concerns.
- Discuss health goals for the visit with the patient and family.

- Prioritize agenda for the visit with the patient and family.
- Elicit age-appropriate information regarding health, nutrition, activities, and health risks.

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

Identify risks to optimal developmental progress (e.g., prematurity, SES, family/genetic conditions, etc.).

Identify patient and parental concerns regarding development, school, and/or work.

Perform standardized, validated, accurate developmental screening tests for infants and children until school age.

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

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

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

#7 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).

#8 Perform age-appropriate immunizations using nationally-recognized periodicity schedules.

#9 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:

#10 Promotion of healthy habits (e.g., physical activity, reading, etc

#11 Injury and illness prevention

#12 Nutrition

#13 Oral health

#14 Age-appropriate medical care

#15 Promotion of social competence

#16 Promotion of positive interactions between the parent and infant/child/adolescent

#17 Promotion of constructive family communication, relationships and parental health

#18 Promotion of community interactions

#19 Promotion of responsibility (adolescence)

#20 Promotion of school achievement (middle childhood, adolescence)

#21 Sexuality (infancy, early and middle childhood, adolescence)

#22 Prevention of substance use/abuse (middle childhood, adolescence)

#23 Physical activity and sports

#24 Interpretation of screening procedures

#25 Prevention of violence

#26 Work collaboratively with professionals in the medical, mental-health, educational and community system to optimize preventive health services for children

#27 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).

#28 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

## **Interpersonal and Communication Skills**

The competency of interpersonal and communication skills include:

- create and sustain a therapeutic and ethically sound relationship with patients
- use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills
- work effectively with others as a member or leader of a health care team or other professional group

## **Interpersonal and Communication Skills :Goals and Objectives**

**Goal #1: Evaluate and manage common signs and symptoms associated with the practice of pediatrics in the Continuity Clinic and Primary Care Pediatric Outpatient Department.**

### **Objectives:**

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

- infancy, 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
- General: constitutional symptoms, excessive crying, failure to thrive, fatigue, fever, weight loss or gain,
- dental caries,
- excessive thumb-sucking or pacifier use,
- difficult behaviors, variations in appetite,
- variations in toilet training,
- overactivity, somatic complaints, poor school performance, attention problems, fatigue,
- masturbation,
- anxiety, violence
- Cardiorespiratory, syncope, tachypnea, wheezing
- Dermatologic: Congenital nevus and other birth marks, pigmentary changes,
- rashes,
- urticaria
- vascular lesions,
- foul smelling umbilical cord
- EENT: conjunctival injection;
- ear or eye discharge;

- ear, throat, eye pain,
- epistaxis;
- GYN: Asymmetry of breast development,
- abnormal vaginal bleeding, pelvic or genital pain,
- vaginal discharge or odor; or erythema,
- delayed onset of menses, missed or irregular periods
- Musculoskeletal: Malpositioning of feet, malpositioning of legs
- hip clicks,
- abnormal gait, abnormal
- spine curvature,
- arthritis or arthralgia,
- bone and soft tissue trauma,
- limb or joint pain,
- limp,
- variations in alignment (e.g., intoeing)

**Goal #2: Recognize and manage common childhood conditions presenting to the Continuity Clinic and Primary Care Pediatric Outpatient**

**Objectives:**

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

infancy: Breast feeding, bottle feeding,

- colic,
- congenital hip dislocation,
- constipation,
- strabismus,
- 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
- General: Colic,
- failure to thrive,
- fever,
- overweight,
- iron deficiency,
- lead exposure,
- 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)
- Dermatology: abscess,
- acne,
- atopic dermatitis,
- cellulitis and superficial skin infections, impetigo,
- molluscum,
- tinea infections,
- viral exanthems,
- verruca vulgaris, other common
- rashes of childhood and adolescence
- constipation, encopresis,
- Gynecologic), labial adhesions, pelvic inflammatory disease, vaginal discharge or
- infectious Disease: Cellulitis,
- cervical adenitis,
- dental abscess with
- complications, otitis media,
- pharyngitis, sinusitis,
- upper respiratory tract infections,
- viral illness,
- recurrent infections
- musculoskeletal: apophysitides, femoral retro- and anteversion,
- fractures,
- growing pains
- , hip dysplasia,
- limp, metatarsus
- adductus, sprains,
- strains, tibial torsion
- Neurology/Psychiatry: Acute neurologic conditions (initial evaluation), behavioral concerns, discipline issues, temper tantrums, biting, developmental delay, seizures (evaluation and adjustment of medications), ADHD, learning disabilities, substance abuse
- Surgery: Initial evaluation of patients requiring urgent referral, pre- and post-op evaluation of surgical patients (general, ENT, ortho, urology, neurosurgical, etc.)

**Goal #3: Utilize common diagnostic tests and imaging studies appropriately in the outpatient department**

**Objectives:**

#1 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 (lab studies).

#2 Recognize cost and utilization issues

#3 Interpret the results in the context of the specific patient

**Goal #4: 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**

**Objectives:**

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

#2 Perform a family centered health supervision interview.



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

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

Identify risks to optimal developmental progress (e.g., prematurity, SES, family/genetic conditions, etc.).

Identify patient and parental concerns regarding development, school, and/or work.

Perform standardized, validated, accurate developmental screening tests for infants and children until school age.

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

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

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

#7 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).

#8 Perform age-appropriate immunizations using nationally-recognized periodicity schedules.

#9 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:

#10 Promotion of healthy habits (e.g., physical activity, reading, etc)

#11 Injury and illness prevention

#12 Nutrition

#13 Oral health

#14 Age-appropriate medical care

#15 Promotion of social competence

#16 Promotion of positive interactions between the parent and infant/child/adolescent

#17 Promotion of constructive family communication, relationships and parental health

#18 Promotion of community interactions

#19 Promotion of responsibility (adolescence)

#20 Promotion of school achievement (middle childhood, adolescence)

#21 Sexuality (infancy, early and middle childhood, adolescence)

#22 Prevention of substance use/abuse (middle childhood, adolescence)

#23 Physical activity and sports

#24 Interpretation of screening procedures

#25 Prevention of violence

#26 Work collaboratively with professionals in the medical, mental-health, educational and community

system to optimize preventive health services for children

#27 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).

#28 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

**Resident Curriculum  
PL-2  
Clinic/Outpatient**

**The PL-2 clinic resident is expected to have achieved all the competencies of a PL-1 resident. They are expected to continue to expand on existing medical knowledge and skills. In addition the PL-2 resident rotation is directed towards gaining familiarity with the health care systems and practicing evidence based medicine in a prudent cost effective manner.**

**A PL-2 resident is expected to teach medical students and interns.**

**A PL-2 resident is expected to 6-8 patients in a half day session.**

**Patient Care**

The competency of patient care includes:

- communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families
- gather essential and accurate information about their patients
- make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
- develop and carry out patient management plans counsel and educate patients and their families
- use information technology to support patient care decisions and patient education
- perform competently all medical and invasive procedures considered essential for the area of practice
- provide health care services aimed at preventing health problems or maintaining health
- work with health care professionals, including those from other disciplines, to provide patient- focused care

**Patient Care: Goals and Objectives**

**Goal #1: Evaluate and manage common signs and symptoms associated with the practice of pediatrics in the Continuity Clinic and Primary Care Pediatric Outpatient Department.**

**Objectives:**

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

- infancy, 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
- General: constitutional symptoms, excessive crying, failure to thrive, fatigue, fever, weight loss or gain,
- dental caries,
- excessive thumb-sucking or pacifier use,
- difficult behaviors, variations in appetite,
- variations in toilet training,
- overactivity, somatic complaints, poor school performance, attention problems, fatigue,
- masturbation,
- anxiety, violence
- Cardiorespiratory, syncope, tachypnea, wheezing
- Dermatologic: Congenital nevus and other birth marks, pigmentary changes,
- rashes,
- urticaria
- vascular lesions,
- foul smelling umbilical cord
- EENT: conjunctival injection;
- ear or eye discharge;
- ear, throat, eye pain,
- epistaxis;
- GYN: Asymmetry of breast development,
- abnormal vaginal bleeding, pelvic or genital pain,
- vaginal discharge or odor; or erythema,
- delayed onset of menses, missed or irregular periods
- Musculoskeletal: Malpositioning of feet, malpositioning of legs
- hip clicks,
- abnormal gait, abnormal
- spine curvature,
- arthritis or arthralgia,
- bone and soft tissue trauma,
- limb or joint pain,
- limp,
- variations in alignment (e.g., intoeing)

**Goal #2: Recognize and manage common childhood conditions presenting to the Continuity Clinic and Primary Care Pediatric Outpatient Department**

**Objectives:** #1. Evaluate and manage the common conditions and situations presenting in the context of health promotion visits.

- infancy: Breast feeding, bottle feeding,
- colic,
- congenital hip dislocation,
- constipation,
- strabismus,
- 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
- General: Colic,
- failure to thrive,
- fever,
- overweight,
- iron deficiency,
- lead exposure,
- 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)
- Dermatology: abscess,
- acne,
- atopic dermatitis,
- cellulitis and superficial skin infections, impetigo,
- molluscum,
- tinea infections,
- viral exanthems,
- verruca vulgaris, other common
- rashes of childhood and adolescence
- constipation, encopresis,
- Gynecologic), labial adhesions, pelvic inflammatory disease, vaginal discharge or
- infectious Disease: Cellulitis,
- cervical adenitis,
- dental abscess with
- complications, otitis media,
- pharyngitis, sinusitis,
- upper respiratory tract infections,
- viral illness,
- recurrent infections
- musculoskeletal: apophysitis, femoral retro- and anteversion,
- fractures,
- growing pains
- , hip dysplasia,
- limp, metatarsus
- adductus, sprains,
- strains, tibial torsion
- Neurology/Psychiatry: Acute neurologic conditions (initial evaluation), behavioral concerns, discipline issues, temper tantrums, biting, developmental delay, seizures (evaluation and adjustment of medications), ADHD, learning disabilities, substance abuse
- Surgery: Initial evaluation of patients requiring urgent referral, pre- and post-op evaluation of surgical

patients (general, ENT, ortho, urology, neurosurgical, etc.)

**Goal #3: 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**

**Objectives:**

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

#2 Perform a family centered health supervision interview.

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

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

Identify risks to optimal developmental progress (e.g., prematurity, SES, family/genetic conditions, etc.).

Identify patient and parental concerns regarding development, school, and/or work.

Perform standardized, validated, accurate developmental screening tests for infants and children until school age.

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

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

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

#7 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).

#8 Perform age-appropriate immunizations using nationally-recognized periodicity schedules.

#9 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:

#10 Promotion of healthy habits (e.g., physical activity, reading, etc

#11 Injury and illness prevention

#12 Nutrition

#13 Oral health

#14 Age-appropriate medical care

#15 Promotion of social competence

#16 Promotion of positive interactions between the parent and infant/child/adolescent

#17 Promotion of constructive family communication, relationships and parental health

#18 Promotion of community interactions

- #19 Promotion of responsibility (adolescence)
- #20 Promotion of school achievement (middle childhood, adolescence)
- #21 Sexuality (infancy, early and middle childhood, adolescence)
- #22 Prevention of substance use/abuse (middle childhood, adolescence)
- #23 Physical activity and sports
- #24 Interpretation of screening procedures
- #25 Prevention of violence
- #26 Work collaboratively with professionals in the medical, mental-health, educational and community system to optimize preventive health services for children
- #27 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).
- #28 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

**Goal #4: Master the practice of pediatrics in the Continuity Clinic and Primary Care Pediatric Outpatient Department in the Light of the Six Competency Domains**

**Objectives:**

- #1 Evaluate and manage the signs and symptoms that present in the context of health care promotion.
- #2 Evaluate and manage the common conditions and situations presenting in the context of health promotion visits.
- #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.
- #7 Use appropriately the common laboratory studies in the Continuity Clinic and Outpatient setting:
  - Hemoglobin A1C
  - Cholesterol
  - Serologic tests for infection (e.g., hepatitis, HIV)
  - Wet preps and skin scrapings for microscopic examination, including scotch tape test for pinworms
  - Thyroid function tests
  - Developmental, behavioral and depression screening tests
- #8 Use the common imaging, diagnostic or radiographic studies when indicated for patients evaluated in Continuity Clinic or the Outpatient Pediatric Clinic: Skin test for tuberculosis

**Goal #5: 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.**

**Objectives:** #1 Demonstrate understanding of the monitoring techniques and special treatments commonly used in the Continuity Clinic and Pediatric Outpatient Department:

- Discuss indications, contraindications and complications.
- Demonstrate proper use of technique or treatment for children of varying ages.
- Interpret results of monitoring based on method used, age and clinical situation.

#2 Appropriately use the monitoring techniques commonly used in the Continuity Clinic and Pediatric Outpatient Department:

- Cardiac monitoring
- Pulse oximetry
- Repeated assessment of temperature, heart rate, respiratory rate, blood pressure, as clinically indicated during an office visit

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

- Universal precautions
- Hand washing between patients
- Isolation techniques
- Administration of nebulized medication
- Injury, wound and burn care
- Oxygen delivery systems
- Intramuscular, subcutaneous and intradermal injections

#4 Recognize normal and abnormal findings at tracheostomy, gastrostomy, or central venous catheter sites, and demonstrate appropriate intervention or referral for problems encountered

#5 Demonstrate skills for assessing and managing pain.

- Use age-appropriate pain scales in assessment.
- Describe indications for and use of behavioral techniques and supportive care, and other non-pharmacologic methods of pain control

**Goal #6: Proficiency in technical and therapeutic procedures.**

**Objectives:**

#1 Be knowledgeable about the following procedures, including how they work and when they should be used; competently perform those commonly used by the pediatrician in practice:

- Breast pump use
- Medication delivery: IM/SC/ID
- Medication delivery: inhaled
- PPD: placement
- Pulmonary function tests: peak flow meter

#2 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:

- ADHD home and school questionnaires
- Behavioral screening questionnaire



- Developmental screening test
- Hearing screening
- PPD: interpretation
- Scoliosis, scoliometer
- Tympanometry evaluation: interpretation
- Vision screening

## Medical Knowledge

The competency of Medical Knowledge includes:

- demonstrate an investigatory and analytic thinking approach to clinical situations
- know and apply the basic and clinically supportive sciences which are appropriate to their discipline

## Medical Knowledge: Goals and Objectives

**Goal #1: Evaluate and manage common signs and symptoms associated with the practice of pediatrics in the Continuity Clinic and Primary Care Pediatric Outpatient Department.**

### Objectives:

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

- infancy, 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
- General: constitutional symptoms, excessive crying, failure to thrive, fatigue, fever, weight loss or gain,
- dental caries,
- excessive thumb-sucking or pacifier use,
- difficult behaviors, variations in appetite,
- variations in toilet training,
- overactivity, somatic complaints, poor school performance, attention problems, fatigue,
- masturbation,
- anxiety, violence
- Cardiorespiratory, syncope, tachypnea, wheezing
- Dermatologic: Congenital nevus and other birth marks, pigmentary changes,
- rashes,
- urticaria
- vascular lesions,
- foul smelling umbilical cord
- EENT: conjunctival injection;
- ear or eye discharge;
- ear, throat, eye pain,
- epistaxis;

- GYN: Asymmetry of breast development,
- abnormal vaginal bleeding, pelvic or genital pain,
- vaginal discharge or odor; or erythema,
- delayed onset of menses, missed or irregular periods
- Musculoskeletal: Malpositioning of feet, malpositioning of legs
- hip clicks,
- abnormal gait, abnormal
- spine curvature,
- arthritis or arthralgia,
- bone and soft tissue trauma,
- limb or joint pain,
- limp,
- variations in alignment (e.g., intoeing)

**Goal #2: Recognize and manage common childhood conditions presenting to the Continuity Clinic and Primary Care Pediatric Outpatient Department**

**Objectives:**

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

- infancy: Breast feeding, bottle feeding,
- colic,
- congenital hip dislocation,
- constipation,
- strabismus,
- 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
- General: Colic,
- failure to thrive,
- fever,
- overweight,
- iron deficiency,
- lead exposure,
- 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)

- Dermatology: abscess,
- acne,
- atopic dermatitis,
- cellulitis and superficial skin infections, impetigo,
- molluscum,
- tinea infections,
- viral exanthems,
- verruca vulgaris, other common
- rashes of childhood and adolescence
- constipation, encopresis,
- Gynecologic), labial adhesions, pelvic inflammatory disease, vaginal discharge or
- infectious Disease: Cellulitis,
- cervical adenitis,
- dental abscess with
- complications, otitis media,
- pharyngitis, sinusitis,
- upper respiratory tract infections,
- viral illness,
- recurrent infections
- musculoskeletal: apophysitides, femoral retro- and anteversion,
- fractures,
- growing pains
- , hip dysplasia,
- limp, metatarsus
- adductus, sprains,
- strains, tibial torsion
- Neurology/Psychiatry: Acute neurologic conditions (initial evaluation), behavioral concerns, discipline issues, temper tantrums, biting, developmental delay, seizures (evaluation and adjustment of medications), ADHD, learning disabilities, substance abuse
- Surgery: Initial evaluation of patients requiring urgent referral, pre- and post-op evaluation of surgical patients (general, ENT, ortho, urology, neurosurgical, etc.)

**Goal #3: Utilize common diagnostic tests and imaging studies appropriately in the outpatient department**

**Objectives:**

#1 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 (lab studies).

#2 Recognize cost and utilization issues

#3 Interpret the results in the context of the specific patient

**Goal #4: 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**

**Objectives:**

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

#2 Perform a family centered health supervision interview.

- Define family and identify significant family members and other significant caretakers and what role they play in the child's life.

- Identify patient and family concerns.
- Discuss health goals for the visit with the patient and family.
- Prioritize agenda for the visit with the patient and family.
- Elicit age-appropriate information regarding health, nutrition, activities, and health risks.

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

Identify risks to optimal developmental progress (e.g., prematurity, SES, family/genetic conditions, etc.).

Identify patient and parental concerns regarding development, school, and/or work.

Perform standardized, validated, accurate developmental screening tests for infants and children until school age.

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

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

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

#7 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).

#8 Perform age-appropriate immunizations using nationally-recognized periodicity schedules.

#9 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:

#10 Promotion of healthy habits (e.g., physical activity, reading, etc)

#11 Injury and illness prevention

#12 Nutrition

#13 Oral health

#14 Age-appropriate medical care

#15 Promotion of social competence

#16 Promotion of positive interactions between the parent and infant/child/adolescent

#17 Promotion of constructive family communication, relationships and parental health

#18 Promotion of community interactions

#19 Promotion of responsibility (adolescence)

#20 Promotion of school achievement (middle childhood, adolescence)

#21 Sexuality (infancy, early and middle childhood, adolescence)

#22 Prevention of substance use/abuse (middle childhood, adolescence)

#23 Physical activity and sports

#24 Interpretation of screening procedures

#25 Prevention of violence

#26 Work collaboratively with professionals in the medical, mental-health, educational and community system to optimize preventive health services for children

#27 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).

#28 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

**Goal #5: Master the practice of pediatrics in the Continuity Clinic and Primary Care Pediatric Outpatient Department in the Light of the Six Competency Domains**

**Objectives:**

#1 Evaluate and manage the signs and symptoms that present in the context of health care promotion.

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

#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.

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

- Hemoglobin A1C
- Cholesterol
- Serologic tests for infection (e.g., hepatitis, HIV)
- Wet preps and skin scrapings for microscopic examination, including scotch tape test for pinworms
- Thyroid function tests
- Developmental, behavioral and depression screening tests

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

**Goal #6: 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.**

**Objectives:**

#1 Demonstrate understanding of the monitoring techniques and special treatments commonly used in the Continuity Clinic and Pediatric Outpatient Department:

- Discuss indications, contraindications and complications.
- Demonstrate proper use of technique or treatment for children of varying ages.
- Interpret results of monitoring based on method used, age and clinical situation.

#2 Appropriately use the monitoring techniques commonly used in the Continuity Clinic and Pediatric Outpatient Department:

- Cardiac monitoring
- Pulse oximetry
- Repeated assessment of temperature, heart rate, respiratory rate, blood pressure, as clinically indicated during an office visit

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

- Universal precautions
- Hand washing between patients
- Isolation techniques
- Administration of nebulized medication
- Injury, wound and burn care
- Oxygen delivery systems
- Intramuscular, subcutaneous and intradermal injections

#4 Recognize normal and abnormal findings at tracheostomy, gastrostomy, or central venous catheter sites, and demonstrate appropriate intervention or referral for problems encountered

#5 Demonstrate skills for assessing and managing pain.

- Use age-appropriate pain scales in assessment.
- Describe indications for and use of behavioral techniques and supportive care, and other non-pharmacologic methods of pain control

**Goal #7: Proficiency in technical and therapeutic procedures.**

**Objectives:**

#1 Be knowledgeable about the following procedures, including how they work and when they should be used; competently perform those commonly used by the pediatrician in practice:

- Breast pump use
- Medication delivery: IM/SC/ID
- Medication delivery: inhaled
- PPD: placement
- Pulmonary function tests: peak flow meter

#2 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:

- ADHD home and school questionnaires
- Behavioral screening questionnaire
- Developmental screening test
- Hearing screening
- PPD: interpretation
- Scoliosis, scoliometer
- Tympanometry evaluation: interpretation
- Vision screening

**Practice- Based Learning and Improvement**

The competency of Practice- Based Learning and Improvement includes:

- analyze practice experience and perform practice-based improvement activities using a systematic methodology
- locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems
- obtain and use information about their own population of patients and the larger population from which their patients are drawn
- apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness
- use information technology to manage information, access on-line medical information; and support their own education
- facilitate the learning of students and other health care professionals

## **Practice- Based Learning and Improvement :Goals and Objectives**

**Goal #1: Master the practice of pediatrics in the Continuity Clinic and Primary Care Pediatric Outpatient Department in the Light of the Six Competency Domains**

### **Objectives:**

#1 Evaluate and manage the signs and symptoms that present in the context of health care promotion.

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

#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.

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

- Hemoglobin A1C
- Cholesterol
- Serologic tests for infection (e.g., hepatitis, HIV)
- Wet preps and skin scrapings for microscopic examination, including scotch tape test for pinworms
- Thyroid function tests
- Developmental, behavioral and depression screening tests

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

**Goal #2: 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.**

**Objectives:**

#1 Demonstrate understanding of the monitoring techniques and special treatments commonly used in the Continuity Clinic and Pediatric Outpatient Department:

- Discuss indications, contraindications and complications.
- Demonstrate proper use of technique or treatment for children of varying ages.
- Interpret results of monitoring based on method used, age and clinical situation.

#2 Appropriately use the monitoring techniques commonly used in the Continuity Clinic and Pediatric Outpatient Department:

- Cardiac monitoring
- Pulse oximetry
- Repeated assessment of temperature, heart rate, respiratory rate, blood pressure, as clinically indicated during an office visit

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

- Universal precautions
- Hand washing between patients
- Isolation techniques
- Administration of nebulized medication
- Injury, wound and burn care
- Oxygen delivery systems
- Intramuscular, subcutaneous and intradermal injections

#4 Recognize normal and abnormal findings at tracheostomy, gastrostomy, or central venous catheter sites, and demonstrate appropriate intervention or referral for problems encountered

#5 Demonstrate skills for assessing and managing pain.

- Use age-appropriate pain scales in assessment.
- Describe indications for and use of behavioral techniques and supportive care, and other non-pharmacologic methods of pain control

**Professionalism**

The competency of Professionalism includes:

- demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development
- demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices
- demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities



## **Professionalism :Goals and Objectives**

**Goal #1: Evaluate and manage common signs and symptoms associated with the practice of pediatrics in the Continuity Clinic and Primary Care Pediatric Outpatient Department.**

### **Objectives:**

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

- infancy, 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
- General: constitutional symptoms, excessive crying, failure to thrive, fatigue, fever, weight loss or gain,
- dental caries,
- excessive thumb-sucking or pacifier use,
- difficult behaviors, variations in appetite,
- variations in toilet training,
- overactivity, somatic complaints, poor school performance, attention problems, fatigue,
- masturbation,
- anxiety, violence
- Cardiorespiratory, syncope, tachypnea, wheezing
- Dermatologic: Congenital nevus and other birth marks, pigmentary changes,
- rashes,
- urticaria
- vascular lesions,
- foul smelling umbilical cord
- EENT: conjunctival injection;
- ear or eye discharge;
- ear, throat, eye pain,
- epistaxis;
- GYN: Asymmetry of breast development,
- abnormal vaginal bleeding, pelvic or genital pain,
- vaginal discharge or odor; or erythema,
- delayed onset of menses, missed or irregular periods
- Musculoskeletal: Malpositioning of feet, malpositioning of legs
- hip clicks,
- abnormal gait, abnormal
- spine curvature,
- arthritis or arthralgia,
- bone and soft tissue trauma,
- limb or joint pain,
- limp,
- variations in alignment (e.g., intoeing)

**Goal #2: Recognize and manage common childhood conditions presenting to the Continuity Clinic**

## and Primary Care Pediatric Outpatient Department

### Objectives:

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

- infancy: Breast feeding, bottle feeding,
- colic,
- congenital hip dislocation,
- constipation,
- strabismus,
- 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
- General: Colic,
- failure to thrive,
- fever,
- overweight,
- iron deficiency,
- lead exposure,
- 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)
- Dermatology: abscess,
- acne,
- atopic dermatitis,
- cellulitis and superficial skin infections, impetigo,
- molluscum,
- tinea infections,
- viral exanthems,
- verruca vulgaris, other common
- rashes of childhood and adolescence
- constipation, encopresis,
- Gynecologic), labial adhesions, pelvic inflammatory disease, vaginal discharge or
- infectious Disease: Cellulitis,
- cervical adenitis,
- dental abscess with
- complications, otitis media,

- pharyngitis, sinusitis,
- upper respiratory tract infections,
- viral illness,
- recurrent infections
- musculoskeletal: apophysitis, femoral retro- and anteversion,
- fractures,
- growing pains
- , hip dysplasia,
- limp, metatarsus
- adductus, sprains,
- strains, tibial torsion
- Neurology/Psychiatry: Acute neurologic conditions (initial evaluation), behavioral concerns, discipline issues, temper tantrums, biting, developmental delay, seizures (evaluation and adjustment of medications), ADHD, learning disabilities, substance abuse
- Surgery: Initial evaluation of patients requiring urgent referral, pre- and post-op evaluation of surgical patients (general, ENT, ortho, urology, neurosurgical, etc.)

**Goal #3: Utilize common diagnostic tests and imaging studies appropriately in the outpatient department**

**Objectives:**

#1 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 (lab studies).

#2 Recognize cost and utilization issues

#3 Interpret the results in the context of the specific patient

**Goal #4: 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**

**Objectives:**

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

#2 Perform a family centered health supervision interview.

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

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

Identify risks to optimal developmental progress (e.g., prematurity, SES, family/genetic conditions, etc.).

Identify patient and parental concerns regarding development, school, and/or work.

Perform standardized, validated, accurate developmental screening tests for infants and children until school age.

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

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

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

#7 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).

#8 Perform age-appropriate immunizations using nationally-recognized periodicity schedules.

#9 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:

#10 Promotion of healthy habits (e.g., physical activity, reading, etc)

#11 Injury and illness prevention

#12 Nutrition

#13 Oral health

#14 Age-appropriate medical care

#15 Promotion of social competence

#16 Promotion of positive interactions between the parent and infant/child/adolescent

#17 Promotion of constructive family communication, relationships and parental health

#18 Promotion of community interactions

#19 Promotion of responsibility (adolescence)

#20 Promotion of school achievement (middle childhood, adolescence)

#21 Sexuality (infancy, early and middle childhood, adolescence)

#22 Prevention of substance use/abuse (middle childhood, adolescence)

#23 Physical activity and sports

#24 Interpretation of screening procedures

#25 Prevention of violence

#26 Work collaboratively with professionals in the medical, mental-health, educational and community system to optimize preventive health services for children

#27 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).

#28 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

## **Interpersonal and Communication Skills**

The competency of interpersonal and communication skills include:

- create and sustain a therapeutic and ethically sound relationship with patients
- use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills

- work effectively with others as a member or leader of a health care team or other professional group

## **Interpersonal and Communication Skills :Goals and Objectives**

**Goal #1: Evaluate and manage common signs and symptoms associated with the practice of pediatrics in the Continuity Clinic and Primary Care Pediatric Outpatient Department.**

**Objectives:**

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

- infancy, 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
- General: constitutional symptoms, excessive crying, failure to thrive, fatigue, fever, weight loss or gain,
- dental caries,
- excessive thumb-sucking or pacifier use,
- difficult behaviors, variations in appetite,
- variations in toilet training,
- overactivity, somatic complaints, poor school performance, attention problems, fatigue,
- masturbation,
- anxiety, violence
- Cardiorespiratory, syncope, tachypnea, wheezing
- Dermatologic: Congenital nevus and other birth marks, pigmentary changes,
- rashes,
- urticaria
- vascular lesions,
- foul smelling umbilical cord
- EENT: conjunctival injection;
- ear or eye discharge;
- ear, throat, eye pain,
- epistaxis;
- GYN: Asymmetry of breast development,
- abnormal vaginal bleeding, pelvic or genital pain,
- vaginal discharge or odor; or erythema,
- delayed onset of menses, missed or irregular periods
- Musculoskeletal: Malpositioning of feet, malpositioning of legs
- hip clicks,
- abnormal gait, abnormal
- spine curvature,
- arthritis or arthralgia,
- bone and soft tissue trauma,
- limb or joint pain,

- limp,
- variations in alignment (e.g., intoeing)

**Goal #2: Recognize and manage common childhood conditions presenting to the Continuity Clinic and Primary Care Pediatric Outpatient**

**Objectives:**

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

infancy: Breast feeding, bottle feeding,

- colic,
- congenital hip dislocation,
- constipation,
- strabismus,
- 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
- General: Colic,
- failure to thrive,
- fever,
- overweight,
- iron deficiency,
- lead exposure,
- 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)
- Dermatology: abscess,
- acne,
- atopic dermatitis,
- cellulitis and superficial skin infections, impetigo,
- molluscum,
- tinea infections,
- viral exanthems,
- verruca vulgaris, other common
- rashes of childhood and adolescence
- constipation, encopresis,
- Gynecologic), labial adhesions, pelvic inflammatory disease, vaginal discharge or
- infectious Disease: Cellulitis,

- cervical adenitis,
- dental abscess with
- complications, otitis media,
- pharyngitis, sinusitis,
- upper respiratory tract infections,
- viral illness,
- recurrent infections
- musculoskeletal: apophysitides, femoral retro- and anteversion,
- fractures,
- growing pains
- , hip dysplasia,
- limp, metatarsus
- adductus, sprains,
- strains, tibial torsion
- Neurology/Psychiatry: Acute neurologic conditions (initial evaluation), behavioral concerns, discipline issues, temper tantrums, biting, developmental delay, seizures (evaluation and adjustment of medications), ADHD, learning disabilities, substance abuse
- Surgery: Initial evaluation of patients requiring urgent referral, pre- and post-op evaluation of surgical patients (general, ENT, ortho, urology, neurosurgical, etc.)

**Goal #3: Utilize common diagnostic tests and imaging studies appropriately in the outpatient department**

**Objectives:**

- #1 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 (lab studies).
- #2 Recognize cost and utilization issues
- #3 Interpret the results in the context of the specific patient

**Goal #4: 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**

**Objectives:**

- #1 Perform health promotion (well child care) visits at recommended ages based on nationally recognized periodicity schedules (e.g., AAP Health Supervision Guidelines, Bright Futures, GAPS).
- #2 Perform a family centered health supervision interview.

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

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

Identify risks to optimal developmental progress (e.g., prematurity, SES, family/genetic conditions, etc.).

Identify patient and parental concerns regarding development, school, and/or work.

Perform standardized, validated, accurate developmental screening tests for infants and children until

school age.

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

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

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

#7 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).

#8 Perform age-appropriate immunizations using nationally-recognized periodicity schedules.

#9 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:

#10 Promotion of healthy habits (e.g., physical activity, reading, etc

#11 Injury and illness prevention

#12 Nutrition

#13 Oral health

#14 Age-appropriate medical care

#15 Promotion of social competence

#16 Promotion of positive interactions between the parent and infant/child/adolescent

#17 Promotion of constructive family communication, relationships and parental health

#18 Promotion of community interactions

#19 Promotion of responsibility (adolescence)

#20 Promotion of school achievement (middle childhood, adolescence)

#21 Sexuality (infancy, early and middle childhood, adolescence)

#22 Prevention of substance use/abuse (middle childhood, adolescence)

#23 Physical activity and sports

#24 Interpretation of screening procedures

#25 Prevention of violence

#26 Work collaboratively with professionals in the medical, mental-health, educational and community system to optimize preventive health services for children

#27 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).

#28 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





**Resident Curriculum  
PL-3  
Clinic/Outpatient**

**The PL-3 resident rotation is directed towards preparation for the independent practice of ambulatory pediatrics.**

**The PL-3 resident is expected to diagnose and formulate accurate and complete management plans with minimal direction from faculty.**

**The PL-3 resident is expected to coordinate the health care needs of a complex patient within a medical home setting and be familiar with different health care systems and resources of the community with minimal direction from faculty.**

**The PL-3 resident is expected to teach medical students and junior residents and can assume a supervisory role if need be. They are expected to assume a leadership role in organizing the teaching sessions in the clinic.**

**The PL-3 resident is expected to see at least 8-10 patients in a half day session.**

### **Patient Care**

The competency of patient care includes:

- communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families
- gather essential and accurate information about their patients
- make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
- develop and carry out patient management plans counsel and educate patients and their families
- use information technology to support patient care decisions and patient education
- perform competently all medical and invasive procedures considered essential for the area of practice
- provide health care services aimed at preventing health problems or maintaining health
- work with health care professionals, including those from other disciplines, to provide patient- focused care

### **Patient Care: Goals and Objectives**

**Goal #1: Evaluate and manage common signs and symptoms associated with the practice of pediatrics in the Continuity Clinic and Primary Care Pediatric Outpatient Department.**

**Objectives:**

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

- infancy, 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
- General: constitutional symptoms, excessive crying, failure to thrive, fatigue, fever, weight loss or gain,
- dental caries,
- excessive thumb-sucking or pacifier use,
- difficult behaviors, variations in appetite,
- variations in toilet training,
- overactivity, somatic complaints, poor school performance, attention problems, fatigue,
- masturbation,
- anxiety, violence
- Cardiorespiratory, syncope, tachypnea, wheezing
- Dermatologic: Congenital nevus and other birth marks, pigmentary changes,
- rashes,
- urticaria
- vascular lesions,
- foul smelling umbilical cord
- EENT: conjunctival injection;
- ear or eye discharge;
- ear, throat, eye pain,
- epistaxis;
- GYN: Asymmetry of breast development,
- abnormal vaginal bleeding, pelvic or genital pain,
- vaginal discharge or odor; or erythema,
- delayed onset of menses, missed or irregular periods
- Musculoskeletal: Malpositioning of feet, malpositioning of legs
- hip clicks,
- abnormal gait, abnormal
- spine curvature,
- arthritis or arthralgia,
- bone and soft tissue trauma,
- limb or joint pain,
- limp,
- variations in alignment (e.g., intoeing)

**Goal #2: Recognize and manage common childhood conditions presenting to the Continuity Clinic and Primary Care Pediatric Outpatient Department**

**Objectives:** #1. Evaluate and manage the common conditions and situations presenting in the context of

health promotion visits.

- infancy: Breast feeding, bottle feeding,
- colic,
- congenital hip dislocation,
- constipation,
- strabismus,
- 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
- General: Colic,
- failure to thrive,
- fever,
- overweight,
- iron deficiency,
- lead exposure,
- 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)
- Dermatology: abscess,
- acne,
- atopic dermatitis,
- cellulitis and superficial skin infections, impetigo,
- molluscum,
- tinea infections,
- viral exanthems,
- verruca vulgaris, other common
- rashes of childhood and adolescence
- constipation, encopresis,
- Gynecologic), labial adhesions, pelvic inflammatory disease, vaginal discharge or
- infectious Disease: Cellulitis,
- cervical adenitis,
- dental abscess with
- complications, otitis media,
- pharyngitis, sinusitis,
- upper respiratory tract infections,
- viral illness,
- recurrent infections

- musculoskeletal: apophysitides, femoral retro- and anteversion,
- fractures,
- growing pains
- , hip dysplasia,
- limp, metatarsus
- adductus, sprains,
- strains, tibial torsion
- Neurology/Psychiatry: Acute neurologic conditions (initial evaluation), behavioral concerns, discipline issues, temper tantrums, biting, developmental delay, seizures (evaluation and adjustment of medications), ADHD, learning disabilities, substance abuse
- Surgery: Initial evaluation of patients requiring urgent referral, pre- and post-op evaluation of surgical patients (general, ENT, ortho, urology, neurosurgical, etc.)

**Goal #3: 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**

**Objectives:**

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

#2 Perform a family centered health supervision interview.

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

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

Identify risks to optimal developmental progress (e.g., prematurity, SES, family/genetic conditions, etc.).

Identify patient and parental concerns regarding development, school, and/or work.

Perform standardized, validated, accurate developmental screening tests for infants and children until school age.

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

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

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

#7 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).

#8 Perform age-appropriate immunizations using nationally-recognized periodicity schedules.

#9 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:

#10 Promotion of healthy habits (e.g., physical activity, reading, etc

- #11 Injury and illness prevention
- #12 Nutrition
- #13 Oral health
- #14 Age-appropriate medical care
- #15 Promotion of social competence
- #16 Promotion of positive interactions between the parent and infant/child/adolescent
- #17 Promotion of constructive family communication, relationships and parental health
- #18 Promotion of community interactions
- #19 Promotion of responsibility (adolescence)
- #20 Promotion of school achievement (middle childhood, adolescence)
- #21 Sexuality (infancy, early and middle childhood, adolescence)
- #22 Prevention of substance use/abuse (middle childhood, adolescence)
- #23 Physical activity and sports
- #24 Interpretation of screening procedures
- #25 Prevention of violence
- #26 Work collaboratively with professionals in the medical, mental-health, educational and community system to optimize preventive health services for children
- #27 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).
- #28 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

**Goal #4: Master the practice of pediatrics in the Continuity Clinic and Primary Care Pediatric Outpatient Department in the Light of the Six Competency Domains**

**Objectives:**

- #1 Evaluate and manage the signs and symptoms that present in the context of health care promotion.
- #2 Evaluate and manage the common conditions and situations presenting in the context of health promotion visits.
- #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.
- #7 Use appropriately the common laboratory studies in the Continuity Clinic and Outpatient setting:
  - Hemoglobin A1C
  - Cholesterol
  - Serologic tests for infection (e.g., hepatitis, HIV)
  - Wet preps and skin scrapings for microscopic examination, including scotch tape test for pinworms

- Thyroid function tests
- Developmental, behavioral and depression screening tests

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

**Goal #5: 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.**

**Objectives:** #1 Demonstrate understanding of the monitoring techniques and special treatments commonly used in the Continuity Clinic and Pediatric Outpatient Department:

- Discuss indications, contraindications and complications.
- Demonstrate proper use of technique or treatment for children of varying ages.
- Interpret results of monitoring based on method used, age and clinical situation.

#2 Appropriately use the monitoring techniques commonly used in the Continuity Clinic and Pediatric Outpatient Department:

- Cardiac monitoring
- Pulse oximetry
- Repeated assessment of temperature, heart rate, respiratory rate, blood pressure, as clinically indicated during an office visit

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

- Universal precautions
- Hand washing between patients
- Isolation techniques
- Administration of nebulized medication
- Injury, wound and burn care
- Oxygen delivery systems
- Intramuscular, subcutaneous and intradermal injections

#4 Recognize normal and abnormal findings at tracheostomy, gastrostomy, or central venous catheter sites, and demonstrate appropriate intervention or referral for problems encountered

#5 Demonstrate skills for assessing and managing pain.

- Use age-appropriate pain scales in assessment.
- Describe indications for and use of behavioral techniques and supportive care, and other non-pharmacologic methods of pain control

**Goal #6: Proficiency in technical and therapeutic procedures.**

**Objectives:**

#1 Be knowledgeable about the following procedures, including how they work and when they should be

used; competently perform those commonly used by the pediatrician in practice:

- Breast pump use
- Medication delivery: IM/SC/ID
- Medication delivery: inhaled
- PPD: placement
- Pulmonary function tests: peak flow meter

#2 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:

- ADHD home and school questionnaires
- Behavioral screening questionnaire
- Developmental screening test
- Hearing screening
- PPD: interpretation
- Scoliosis, scoliometer
- Tympanometry evaluation: interpretation
- Vision screening

## **Medical Knowledge**

The competency of Medical Knowledge includes:

- demonstrate an investigatory and analytic thinking approach to clinical situations
- know and apply the basic and clinically supportive sciences which are appropriate to their discipline

## **Medical Knowledge: Goals and Objectives**

**Goal #1: Evaluate and manage common signs and symptoms associated with the practice of pediatrics in the Continuity Clinic and Primary Care Pediatric Outpatient Department.**

### **Objectives:**

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

- infancy, 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
- General: constitutional symptoms, excessive crying, failure to thrive, fatigue, fever, weight loss or gain,
- dental caries,
- excessive thumb-sucking or pacifier use,
- difficult behaviors, variations in appetite,
- variations in toilet training,
- overactivity, somatic complaints, poor school performance, attention problems, fatigue,



- masturbation,
- anxiety, violence
- Cardiorespiratory, syncope, tachypnea, wheezing
- Dermatologic: Congenital nevus and other birth marks, pigmentary changes,
- rashes,
- urticaria
- vascular lesions,
- foul smelling umbilical cord
- EENT: conjunctival injection;
- ear or eye discharge;
- ear, throat, eye pain,
- epistaxis;
- GYN: Asymmetry of breast development,
- abnormal vaginal bleeding, pelvic or genital pain,
- vaginal discharge or odor; or erythema,
- delayed onset of menses, missed or irregular periods
- Musculoskeletal: Malpositioning of feet, malpositioning of legs
- hip clicks,
- abnormal gait, abnormal
- spine curvature,
- arthritis or arthralgia,
- bone and soft tissue trauma,
- limb or joint pain,
- limp,
- variations in alignment (e.g., intoeing)

**Goal #2: Recognize and manage common childhood conditions presenting to the Continuity Clinic and Primary Care Pediatric Outpatient Department**

**Objectives:**

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

- infancy: Breast feeding, bottle feeding,
- colic,
- congenital hip dislocation,
- constipation,
- strabismus,
- 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
- General: Colic,
- failure to thrive,
- fever,

- overweight,
- iron deficiency,
- lead exposure,
- 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)
- Dermatology: abscess,
- acne,
- atopic dermatitis,
- cellulitis and superficial skin infections, impetigo,
- molluscum,
- tinea infections,
- viral exanthems,
- verruca vulgaris, other common
- rashes of childhood and adolescence
- constipation, encopresis,
- Gynecologic), labial adhesions, pelvic inflammatory disease, vaginal discharge or
- infectious Disease: Cellulitis,
- cervical adenitis,
- dental abscess with
- complications, otitis media,
- pharyngitis, sinusitis,
- upper respiratory tract infections,
- viral illness,
- recurrent infections
- musculoskeletal: apophysitides, femoral retro- and anteversion,
- fractures,
- growing pains
- , hip dysplasia,
- limp, metatarsus
- adductus, sprains,
- strains, tibial torsion
- Neurology/Psychiatry: Acute neurologic conditions (initial evaluation), behavioral concerns, discipline issues, temper tantrums, biting, developmental delay, seizures (evaluation and adjustment of medications), ADHD, learning disabilities, substance abuse
- Surgery: Initial evaluation of patients requiring urgent referral, pre- and post-op evaluation of surgical patients (general, ENT, ortho, urology, neurosurgical, etc.)

**Goal #3: Utilize common diagnostic tests and imaging studies appropriately in the outpatient department**

**Objectives:**

#1 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 (lab studies).

#2 Recognize cost and utilization issues

#3 Interpret the results in the context of the specific patient

**Goal #4: 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**

**Objectives:**

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

#2 Perform a family centered health supervision interview.

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

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

Identify risks to optimal developmental progress (e.g., prematurity, SES, family/genetic conditions, etc.).

Identify patient and parental concerns regarding development, school, and/or work.

Perform standardized, validated, accurate developmental screening tests for infants and children until school age.

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

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

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

#7 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).

#8 Perform age-appropriate immunizations using nationally-recognized periodicity schedules.

#9 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:

#10 Promotion of healthy habits (e.g., physical activity, reading, etc

#11 Injury and illness prevention

#12 Nutrition

#13 Oral health

#14 Age-appropriate medical care

#15 Promotion of social competence

#16 Promotion of positive interactions between the parent and infant/child/adolescent

#17 Promotion of constructive family communication, relationships and parental health

#18 Promotion of community interactions

#19 Promotion of responsibility (adolescence)

- #20 Promotion of school achievement (middle childhood, adolescence)
- #21 Sexuality (infancy, early and middle childhood, adolescence)
- #22 Prevention of substance use/abuse (middle childhood, adolescence)
- #23 Physical activity and sports
- #24 Interpretation of screening procedures
- #25 Prevention of violence
- #26 Work collaboratively with professionals in the medical, mental-health, educational and community system to optimize preventive health services for children
- #27 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).
- #28 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

**Goal #5: Master the practice of pediatrics in the Continuity Clinic and Primary Care Pediatric Outpatient Department in the Light of the Six Competency Domains**

**Objectives:**

- #1 Evaluate and manage the signs and symptoms that present in the context of health care promotion.
- #2 Evaluate and manage the common conditions and situations presenting in the context of health promotion visits.
- #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.
- #7 Use appropriately the common laboratory studies in the Continuity Clinic and Outpatient setting:
  - Hemoglobin A1C
  - Cholesterol
  - Serologic tests for infection (e.g., hepatitis, HIV)
  - Wet preps and skin scrapings for microscopic examination, including scotch tape test for pinworms
  - Thyroid function tests
  - Developmental, behavioral and depression screening tests
- #8 Use the common imaging, diagnostic or radiographic studies when indicated for patients evaluated in Continuity Clinic or the Outpatient Pediatric Clinic: Skin test for tuberculosis

**Goal #6: 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.**

**Objectives:**

#1 Demonstrate understanding of the monitoring techniques and special treatments commonly used in the Continuity Clinic and Pediatric Outpatient Department:

- Discuss indications, contraindications and complications.
- Demonstrate proper use of technique or treatment for children of varying ages.
- Interpret results of monitoring based on method used, age and clinical situation.

#2 Appropriately use the monitoring techniques commonly used in the Continuity Clinic and Pediatric Outpatient Department:

- Cardiac monitoring
- Pulse oximetry
- Repeated assessment of temperature, heart rate, respiratory rate, blood pressure, as clinically indicated during an office visit

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

- Universal precautions
- Hand washing between patients
- Isolation techniques
- Administration of nebulized medication
- Injury, wound and burn care
- Oxygen delivery systems
- Intramuscular, subcutaneous and intradermal injections

#4 Recognize normal and abnormal findings at tracheostomy, gastrostomy, or central venous catheter sites, and demonstrate appropriate intervention or referral for problems encountered

#5 Demonstrate skills for assessing and managing pain.

- Use age-appropriate pain scales in assessment.
- Describe indications for and use of behavioral techniques and supportive care, and other non-pharmacologic methods of pain control

**Goal #7: Proficiency in technical and therapeutic procedures.****Objectives:**

#1 Be knowledgeable about the following procedures, including how they work and when they should be used; competently perform those commonly used by the pediatrician in practice:

- Breast pump use
- Medication delivery: IM/SC/ID
- Medication delivery: inhaled
- PPD: placement
- Pulmonary function tests: peak flow meter

#2 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:

- ADHD home and school questionnaires
- Behavioral screening questionnaire
- Developmental screening test
- Hearing screening
- PPD: interpretation
- Scoliosis, scoliometer
- Tympanometry evaluation: interpretation
- Vision screening

## **Practice- Based Learning and Improvement**

The competency of Practice- Based Learning and Improvement includes:

- analyze practice experience and perform practice-based improvement activities using a systematic methodology
- locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems
- obtain and use information about their own population of patients and the larger population from which their patients are drawn
- apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness
- use information technology to manage information, access on-line medical information; and support their own education
- facilitate the learning of students and other health care professionals

## **Practice- Based Learning and Improvement :Goals and Objectives**

**Goal #1: Master the practice of pediatrics in the Continuity Clinic and Primary Care Pediatric Outpatient Department in the Light of the Six Competency Domains**

### **Objectives:**

- #1 Evaluate and manage the signs and symptoms that present in the context of health care promotion.
- #2 Evaluate and manage the common conditions and situations presenting in the context of health promotion visits.
- #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.
- #7 Use appropriately the common laboratory studies in the Continuity Clinic and Outpatient setting:
  - Hemaglobin A1C
  - Cholesterol
  - Serologic tests for infection (e.g., hepatitis, HIV)
  - Wet preps and skin scrapings for microscopic examination, including scotch tape test for pinworms

- Thyroid function tests
- Developmental, behavioral and depression screening tests

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

**Goal #2: 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.**

**Objectives:**

#1 Demonstrate understanding of the monitoring techniques and special treatments commonly used in the Continuity Clinic and Pediatric Outpatient Department:

- Discuss indications, contraindications and complications.
- Demonstrate proper use of technique or treatment for children of varying ages.
- Interpret results of monitoring based on method used, age and clinical situation.

#2 Appropriately use the monitoring techniques commonly used in the Continuity Clinic and Pediatric Outpatient Department:

- Cardiac monitoring
- Pulse oximetry
- Repeated assessment of temperature, heart rate, respiratory rate, blood pressure, as clinically indicated during an office visit

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

- Universal precautions
- Hand washing between patients
- Isolation techniques
- Administration of nebulized medication
- Injury, wound and burn care
- Oxygen delivery systems
- Intramuscular, subcutaneous and intradermal injections

#4 Recognize normal and abnormal findings at tracheostomy, gastrostomy, or central venous catheter sites, and demonstrate appropriate intervention or referral for problems encountered

#5 Demonstrate skills for assessing and managing pain.

- Use age-appropriate pain scales in assessment.
- Describe indications for and use of behavioral techniques and supportive care, and other non-pharmacologic methods of pain control

**Professionalism**

The competency of Professionalism includes:

- demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development
- demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices
- demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities

## **Professionalism :Goals and Objectives**

**Goal #1: Evaluate and manage common signs and symptoms associated with the practice of pediatrics in the Continuity Clinic and Primary Care Pediatric Outpatient Department.**

### **Objectives:**

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

- infancy, 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
- General: constitutional symptoms, excessive crying, failure to thrive, fatigue, fever, weight loss or gain,
- dental caries,
- excessive thumb-sucking or pacifier use,
- difficult behaviors, variations in appetite,
- variations in toilet training,
- overactivity, somatic complaints, poor school performance, attention problems, fatigue,
- masturbation,
- anxiety, violence
- Cardiorespiratory, syncope, tachypnea, wheezing
- Dermatologic: Congenital nevus and other birth marks, pigmentary changes,
- rashes,
- urticaria
- vascular lesions,
- foul smelling umbilical cord
- EENT: conjunctival injection;
- ear or eye discharge;
- ear, throat, eye pain,
- epistaxis;
- GYN: Asymmetry of breast development,
- abnormal vaginal bleeding, pelvic or genital pain,
- vaginal discharge or odor; or erythema,
- delayed onset of menses, missed or irregular periods
- Musculoskeletal: Malpositioning of feet, malpositioning of legs



- hip clicks,
- abnormal gait, abnormal
- spine curvature,
- arthritis or arthralgia,
- bone and soft tissue trauma,
- limb or joint pain,
- limp,
- variations in alignment (e.g., intoeing)

**Goal #2: Recognize and manage common childhood conditions presenting to the Continuity Clinic and Primary Care Pediatric Outpatient Department**

**Objectives:**

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

- infancy: Breast feeding, bottle feeding,
- colic,
- congenital hip dislocation,
- constipation,
- strabismus,
- 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
- General: Colic,
- failure to thrive,
- fever,
- overweight,
- iron deficiency,
- lead exposure,
- 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)
- Dermatology: abscess,
- acne,
- atopic dermatitis,
- cellulitis and superficial skin infections, impetigo,
- molluscum,

- tinea infections,
- viral exanthems,
- verruca vulgaris, other common
- rashes of childhood and adolescence
- constipation, encopresis,
- Gynecologic), labial adhesions, pelvic inflammatory disease, vaginal discharge or
- infectious Disease: Cellulitis,
- cervical adenitis,
- dental abscess with
- complications, otitis media,
- pharyngitis, sinusitis,
- upper respiratory tract infections,
- viral illness,
- recurrent infections
- musculoskeletal: apophysitis, femoral retro- and anteversion,
- fractures,
- growing pains
- , hip dysplasia,
- limp, metatarsus
- adductus, sprains,
- strains, tibial torsion
- Neurology/Psychiatry: Acute neurologic conditions (initial evaluation), behavioral concerns, discipline issues, temper tantrums, biting, developmental delay, seizures (evaluation and adjustment of medications), ADHD, learning disabilities, substance abuse
- Surgery: Initial evaluation of patients requiring urgent referral, pre- and post-op evaluation of surgical patients (general, ENT, ortho, urology, neurosurgical, etc.)

**Goal #3: Utilize common diagnostic tests and imaging studies appropriately in the outpatient department**

**Objectives:**

- #1 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 (lab studies).
- #2 Recognize cost and utilization issues
- #3 Interpret the results in the context of the specific patient

**Goal #4: 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**

**Objectives:**

- #1 Perform health promotion (well child care) visits at recommended ages based on nationally recognized periodicity schedules (e.g., AAP Health Supervision Guidelines, Bright Futures, GAPS).
  - #2 Perform a family centered health supervision interview.
- Define family and identify significant family members and other significant caretakers and what role they play in the child's life.
  - Identify patient and family concerns.
  - Discuss health goals for the visit with the patient and family.
  - Prioritize agenda for the visit with the patient and family.
  - Elicit age-appropriate information regarding health, nutrition, activities, and health risks.

- #3 Perform age-appropriate developmental surveillance, developmental screening, school performance monitoring and job performance monitoring.
- Identify risks to optimal developmental progress (e.g., prematurity, SES, family/genetic conditions, etc.).
- Identify patient and parental concerns regarding development, school, and/or work.
- Perform standardized, validated, accurate developmental screening tests for infants and children until school age.
- #4 Critically observe interactions between the parent and the infant, child, or adolescent.
- #5 Perform physical exam with special focus on age-dependent concerns and patient or family concerns
- #6 Order or perform and interpret additional age-appropriate screening procedure, using nationally-recognized periodicity schedules and local or state expectations (e.g., newborn screening, lead, hematocrit, hemoglobin for sickle cell, blood pressure, cardiovascular risk assessment, vision, hearing, dental assessment, reproductive-related concerns
- #7 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).
- #8 Perform age-appropriate immunizations using nationally-recognized periodicity schedules.
- #9 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:
- #10 Promotion of healthy habits (e.g., physical activity, reading, etc
- #11 Injury and illness prevention
- #12 Nutrition
- #13 Oral health
- #14 Age-appropriate medical care
- #15 Promotion of social competence
- #16 Promotion of positive interactions between the parent and infant/child/adolescent
- #17 Promotion of constructive family communication, relationships and parental health
- #18 Promotion of community interactions
- #19 Promotion of responsibility (adolescence)
- #20 Promotion of school achievement (middle childhood, adolescence)
- #21 Sexuality (infancy, early and middle childhood, adolescence)
- #22 Prevention of substance use/abuse (middle childhood, adolescence)
- #23 Physical activity and sports
- #24 Interpretation of screening procedures
- #25 Prevention of violence
- #26 Work collaboratively with professionals in the medical, mental-health, educational and community system to optimize preventive health services for children
- #27 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).
- #28 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

## **Interpersonal and Communication Skills**

The competency of interpersonal and communication skills include:

- create and sustain a therapeutic and ethically sound relationship with patients
- use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills
- work effectively with others as a member or leader of a health care team or other professional group

## **Interpersonal and Communication Skills :Goals and Objectives**

**Goal #1: Evaluate and manage common signs and symptoms associated with the practice of pediatrics in the Continuity Clinic and Primary Care Pediatric Outpatient Department.**

### **Objectives:**

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

- infancy, 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
- General: constitutional symptoms, excessive crying, failure to thrive, fatigue, fever, weight loss or gain,
- dental caries,
- excessive thumb-sucking or pacifier use,
- difficult behaviors, variations in appetite,
- variations in toilet training,
- overactivity, somatic complaints, poor school performance, attention problems, fatigue,
- masturbation,
- anxiety, violence
- Cardiorespiratory, syncope, tachypnea, wheezing
- Dermatologic: Congenital nevus and other birth marks, pigmentary changes,
- rashes,
- urticaria
- vascular lesions,
- foul smelling umbilical cord
- EENT: conjunctival injection;
- ear or eye discharge;
- ear, throat, eye pain,
- epistaxis;
- GYN: Asymmetry of breast development,

- abnormal vaginal bleeding, pelvic or genital pain,
- vaginal discharge or odor; or erythema,
- delayed onset of menses, missed or irregular periods
- Musculoskeletal: Malpositioning of feet, malpositioning of legs
- hip clicks,
- abnormal gait, abnormal
- spine curvature,
- arthritis or arthralgia,
- bone and soft tissue trauma,
- limb or joint pain,
- limp,
- variations in alignment (e.g., intoeing)

**Goal #2: Recognize and manage common childhood conditions presenting to the Continuity Clinic and Primary Care Pediatric Outpatient**

**Objectives:**

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

infancy: Breast feeding, bottle feeding,

- colic,
- congenital hip dislocation,
- constipation,
- strabismus,
- 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
- General: Colic,
- failure to thrive,
- fever,
- overweight,
- iron deficiency,
- lead exposure,
- 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)
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- acne,

- atopic dermatitis,
- cellulitis and superficial skin infections, impetigo,
- molluscum,
- tinea infections,
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- verruca vulgaris, other common
- rashes of childhood and adolescence
- constipation, encopresis,
- Gynecologic), labial adhesions, pelvic inflammatory disease, vaginal discharge or
- infectious Disease: Cellulitis,
- cervical adenitis,
- dental abscess with
- complications, otitis media,
- pharyngitis, sinusitis,
- upper respiratory tract infections,
- viral illness,
- recurrent infections
- musculoskeletal: apophysitis, femoral retro- and anteversion,
- fractures,
- growing pains
- , hip dysplasia,
- limp, metatarsus
- adductus, sprains,
- strains, tibial torsion
- Neurology/Psychiatry: Acute neurologic conditions (initial evaluation), behavioral concerns, discipline issues, temper tantrums, biting, developmental delay, seizures (evaluation and adjustment of medications), ADHD, learning disabilities, substance abuse
- Surgery: Initial evaluation of patients requiring urgent referral, pre- and post-op evaluation of surgical patients (general, ENT, ortho, urology, neurosurgical, etc.)

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#2 Recognize cost and utilization issues

#3 Interpret the results in the context of the specific patient

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- Identify patient and family concerns.
- Discuss health goals for the visit with the patient and family.

- Prioritize agenda for the visit with the patient and family.
- Elicit age-appropriate information regarding health, nutrition, activities, and health risks.

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

Identify risks to optimal developmental progress (e.g., prematurity, SES, family/genetic conditions, etc.).

Identify patient and parental concerns regarding development, school, and/or work.

Perform standardized, validated, accurate developmental screening tests for infants and children until school age.

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

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

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

#7 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).

#8 Perform age-appropriate immunizations using nationally-recognized periodicity schedules.

#9 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:

#10 Promotion of healthy habits (e.g., physical activity, reading, etc)

#11 Injury and illness prevention

#12 Nutrition

#13 Oral health

#14 Age-appropriate medical care

#15 Promotion of social competence

#16 Promotion of positive interactions between the parent and infant/child/adolescent

#17 Promotion of constructive family communication, relationships and parental health

#18 Promotion of community interactions

#19 Promotion of responsibility (adolescence)

#20 Promotion of school achievement (middle childhood, adolescence)

#21 Sexuality (infancy, early and middle childhood, adolescence)

#22 Prevention of substance use/abuse (middle childhood, adolescence)

#23 Physical activity and sports

#24 Interpretation of screening procedures

#25 Prevention of violence

#26 Work collaboratively with professionals in the medical, mental-health, educational and community system to optimize preventive health services for children

#27 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).

#28 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







<p>5.54.2 : Provide counseling to parents and patients with specific infectious diseases about:</p> <ol style="list-style-type: none"> <li>1. HIV testing, transmission and follow-up</li> <li>2. TB exposure, expected course, treatment and transmission</li> <li>3. Hepatitis B expected course, treatment and transmission</li> </ol> <p>5.54.3 : Provide routine and appropriate screening for infectious disease processes.</p> <ol style="list-style-type: none"> <li>1. Screen for tuberculosis in high-risk populations and as schools require.</li> <li>2. Screen for hepatitis, parasites, and other disease processes in new immigrants as appropriate.</li> <li>3. Counsel and screen pregnant women and screen newborns for HIV.</li> <li>4. Screen sexually abused children for sexually transmitted diseases (STDs), such as gonococcal, chlamydia, human immunodeficiency virus, hepatitis B, and syphilis.</li> <li>5. Screen sexually active adolescents for STDs at health visits.</li> <li>6. Take measures to prevent Group B strep in newborns</li> <li>7. List situations in which screening is not appropriate but may be requested (e.g.,</li> </ol>										
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<p>12. Systemic: viral exanthems (measles, varicella, herpes simplex virus, parvovirus, rubella, human herpes virus 6), zoonoses (cat scratch disease), and viruses (infectious mononucleosis syndrome with either Epstein-Barr virus, Cytomegalovirus, or toxoplasma, respiratory syncytial virus disease, influenza, enterovirus, adenovirus)</p> <p>13. Perinatal: focal infections of the scalp, mastitis, omphalitis, Group B strep and candidal infections</p> <p>14. Infants/toddlers: potential occult bacteremia</p> <p>15. Adolescents: sexually transmitted diseases (see genital infections)</p> <p>16. Fever without localizing signs in various age groups</p> <p>Fever in patient with underlying disease (e.g., in a patient with congenital heart disease)</p>										
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**Goal: Conditions Generally Referred (Infectious Disease). Recognize and initiate therapy in patients with infectious disease conditions that require consultation or referral.**

Objectives	Priority Yes/No	Teaching			Evaluation			Domain	Skills	PGY
		Who	Where	Method	Who	Where	Method			
<p>Identify, explain, initially manage, and refer the following infectious diseases:</p> <ol style="list-style-type: none"> <li>Upper respiratory: mastoiditis</li> <li>Oral/pharyngeal: peritonsillar, retropharyngeal and dental abscesses</li> <li>Middle airway: epiglottitis, bacterial tracheitis,</li> </ol>										



<p>pertussis (symptoms requiring further evaluation and/or admission)</p> <ol style="list-style-type: none"> <li>4. Lower airway: fungal pneumonia, severe or complicated pneumonia, parapneumonic effusion, empyema and lung abscess</li> <li>5. Heart: endocarditis, thrombophlebitis, pericarditis, myocarditis, mediastinitis and acute rheumatic fever</li> <li>6. GI tract: hepatic abscess, cholangitis/cholecystitis, chronic hepatitis B, C and D, hemolytic uremic syndrome, pancreatitis, appendicitis, peritonitis and abscess</li> <li>7. Renal and perinephric abscesses</li> <li>8. Genital: complicated PID and tubo-ovarian abscess</li> <li>9. Musculoskeletal: osteomyelitis, septic arthritis, discitis and pyomyositis</li> <li>10. CNS: complicated bacterial meningitis, brain abscess, epidural, subdural and paraspinal abscesses, encephalitis, transverse myelitis, peripheral neuropathies (diphtheria, botulism, tetanus), acute cerebellar ataxia not associated with varicella and Guillain-Barre, acute disseminated encephalomyelitis (ADEM), and partially treated meningitis</li> <li>11. Soft tissue: staphylococcal scalded skin, toxic epidermal necrolysis,</li> </ol>										
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<p>fasciitis</p> <p>12. Eyes: orbital cellulitis, keratitis and endophthalmitis</p> <p>13. Systemic: zoonoses/arthropod borne disease (brucella, leptospirosis, cat scratch, Ehrlichia, tularemia, Lyme, Rocky Mountain spotted fever) and Kawasaki disease</p> <p>14. Intrauterine infections: CMV, rubella, parvovirus B19, syphilis, toxoplasmosis, herpes simplex virus (HSV) and varicella</p> <p>15. Other: prenatal exposure to or congenital human immunodeficiency virus, acquired immunodeficiency syndrome, tuberculosis, systemic fungal infections, disseminated gonococcal infection, endotoxin shock, toxic shock, fever of unknown origin, fever and neutropenia, fever in immunocompromised patients</p> <p>16. Immunocompromised hosts: acquired immunodeficiency syndrome, chemotherapy, steroid suppression, primary immunodeficiency, and organ or stem cell transplant recipient</p> <p>17. Newborn: perinatal herpes, perinatal systemic fungal, varicella and enteroviral sepsis</p>										
<p>5.58.2 : Identify the role and general scope of practice of</p>										





treatments for infectious diseases, and consistently use current information when prescribing antibiotics.										
Radiologic interpretation: abdominal X-ray										
Radiologic interpretation: cervical spine X-ray										
Radiologic interpretation: chest X-ray										
Radiologic interpretation: CT of head										
Radiologic interpretation: extremity X-ray										
Radiologic interpretation: GI contrast study										
Radiologic interpretation: lateral neck X-ray										
Radiologic interpretation: MRI of head										
Radiologic interpretation: renal ultrasound										
Radiologic interpretation: skeletal X-ray (incl. abuse)										
Radiologic interpretation: skull film for fracture										

**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](http://www.ambpeds.org/egweb). [Accessed 04/19/2007]. Project to develop this website was funded by the Josiah Macy, Jr. Foundation 2002-2005.

### Legend

<b>Teaching Methods</b>	<b>RRC Domains</b>
<ul style="list-style-type: none"><li>A. Clinical encounter</li><li>B. Lecture</li><li>C. Seminar or a small group</li><li>D. Assigned reading</li><li>E. Case conference</li><li>F. Morning report</li><li>G. Grand rounds</li><li>H. Presentation</li><li>I. AV media module</li><li>J. Web-based module</li><li>K. Journal reading/presenting</li><li>L. M&amp;M conference</li><li>M. Portfolio</li><li>N. Quality improvement activity</li></ul>	<ul style="list-style-type: none"><li>PC – Patient Care</li><li>MK – Medical Knowledge</li><li>PBLI – Practice-based Learning and Improvement</li><li>COM – Interpersonal Skills and Communication</li><li>PRO – Professionalism</li><li>SBP – Systems-based Practice</li></ul>

O. Supervised activity		
<p><b>Evaluation Methods</b></p> <ul style="list-style-type: none"> <li>a. Global rating</li> <li>b. Direct observation with checklist</li> <li>c. Consensus opinion/multiple raters</li> <li>d. 360 rating</li> <li>e. Written examination</li> <li>f. Patient survey</li> <li>g. Case/procedure log</li> <li>h. Conference attendance log</li> <li>i. EBM activity log</li> <li>j. QI activity assessment</li> <li>k. Systems error activity/discussion</li> <li>l. Self assessment</li> <li>m. Individual learning plan</li> <li>n. Critical incident discussion</li> </ul>	<p><b>Basic Clinical and Professional Skills</b></p> <ol style="list-style-type: none"> <li>1. Perform an appropriate clinical exam</li> <li>2. Appropriately use diagnostic studies, procedures and labs</li> <li>3. Apply sound decision-making and clinical judgment</li> <li>4. Use medications and therapies safely and effectively</li> <li>5. Manage and advocate for the whole patient</li> <li>6. Skillfully and empathically manage patient's acute or terminal illness, or death.</li> <li>7. Effectively and empathically communicate with patients and families.</li> <li>8. Effective data gathering from history and interview.</li> <li>9. Promotion of patient education and counseling.</li> <li>10. Effective use of telephone communications.</li> <li>11. Professional communication and collaboration in healthcare teams.</li> <li>12. Maintain accurate, legible, timely and legally appropriate medical records when caring for patients.</li> <li>13. Effective teaching of students, colleagues, other professionals and lay groups.</li> <li>14. Develop and demonstrate effective leadership and collaboration skills.</li> <li>15. Function as a consultant to other physicians and health professionals</li> <li>16. Use consultations and referrals effectively</li> <li>17. Develop responsible and productive work habits and professional responsibility.</li> <li>18. Develop personal responsibility and balance personal and professional interests.</li> <li>19. Understand basic principles in medical ethics and identify issues.</li> <li>20. Understand legal issues in pediatric practice</li> <li>21. Develop skills in life-long learning and self-assessment.</li> <li>22. Responsible use of information technology in decision-making and patient management.</li> <li>23. Critically read and apply scientific evidence/research to patient care.</li> <li>24. Formulate career plans.</li> </ol>	



### **Curriculum of Pediatric Residents rotation with Pediatric Anesthesiologists**

1. General pediatric residents are expected to develop competency in the area of medical knowledge in the area of Anesthesia as defined by the American Board of Pediatrics
2. Residents must demonstrate having enough medical knowledge to competently care for patients Commonly managed by general pediatricians in the area of Anesthesia.

#### **The Faculty in the Department of Anesthesia**

Precept resident on a case-by-case basis.

#### **Overall General Goals and Objectives of the Rotation: Anesthesia Goal:**

Pediatric residents will demonstrate that they are competent, as a general pediatrician, to manage common noncomplex problems in the field of Anesthesia by the end of the rotation.

#### ***ACGME Competencies: Patient Care***

Residents will be competent in taking a history and performing a physical examination on pediatric patients seen by the Department of Anesthesia

(ACGME requires that each resident be observed and their competency assessed on their performance of a history and physical exam on one patient during the rotation.)

**Goal:** Pediatric residents will demonstrate competency in communicating with other health care providers.

#### ***ACGME Competency: Interpersonal and Communication Skills***

Objective: Pediatric residents will document in the medical record/EMR properly

**Goal:** The pediatric resident will apply diagnostic and screening procedures to properly care for patients in the area of Anesthesia, that the general pediatrician is expected to be able to manage, by the end of the rotation.

#### ***ACGME Competencies: Patient Care and Medical Knowledge***

**Goal:** Pediatric residents will demonstrate good communication skills when working as a team with other health care providers in managing children during the rotation.

#### ***ACGME Competency: Interpersonal and Communication Skills***

##### **Process objectives:**

1. Objective: The pediatric resident will use SBAR to communicate about the patient's condition with other health care providers in urgent/emergent situations.
2. Objective: The pediatric resident will identify themselves properly to the patient and their family.
3. Objective: The pediatric resident will communicate with Anesthesiologists, Surgeons, Anesthesia Nurse Practitioners, to ensure good continuity of care.

**Goal:** Pediatric residents will administer supportive family centered care to patients and their families while working in the Department of Anesthesia.



**ACGME Competency: Patient Care and Interpersonal and Communication Skills:**

1. Objective: Pediatric residents will invite patient's caretakers to be present during their child's care.
2. Objective: Pediatric residents will educate patients and their caretakers how to manage their condition in terms they can comprehend.

**Goal:** Pediatric residents will demonstrate the ability to critically appraise the literature in the area of Anesthesia during the rotation.

**ACGME Competency: Practice Based Learning and Improvement**

1. Objective: Pediatric residents will demonstrate they are able to apply the knowledge they gained from reading the rotation's assigned materials and apply this information to patient care.
2. Objective: Pediatric residents will bring relevant evidenced-based literature to the bedside/clinic in order to enhance the care of their patients.

**Goal:** Pediatric residents will be actively involved in the Department of Anesthesia's quality Improvement processes and will promote measures to attain operational excellence during their rotation.

**ACGME Competency: Systems Based Practice**

**Goal:** Pediatric residents will act as a professional member of the health care team.

**ACGME Competency: Professionalism**

**Process objectives:**

1. Objective: Pediatric residents will attend the orientation to the rotation.
2. Objective: Pediatric residents will be prompt for all of their clinical and educational sessions.
3. Objective: Pediatric residents will sign out their patients to other health care providers, using SBAR, >100% of the time.
4. Objective: Pediatric residents will act as a team member.
5. Objective: Pediatric residents will see patients in the order as directed by the faculty.
6. Objective: Pediatric residents will:
  - Act with honesty/integrity
  - Demonstrate reliability/responsibility
  - Be respectful of others
  - Display compassion/empathy
  - Wish to always self improve one's care
  - Demonstrate self-awareness/knowledge of limits
  - Demonstrate altruism/advocacy

**Goal of the Rotation:**

Objective: Residents will demonstrate procedural competency as noted by:

- List procedures required per ACGME's RC in Pediatrics:
- BVM ventilation (primary goal of the rotation)
- Placement of interavenous cathedras: during Anesthesia
- Placement of LMAs
- Endotracheal Intubation
- Delivery of medications used in Anesthesia
- Administer PSA to patients undergoing painful procedures
- Administer PSA to patients undergoing painless procedures

**Instructional Methods:** Residents will be taught and precepted by Pediatric Anesthesiologists and Nurse Anesthetists/ Practitioners and physicians with deep Procedural Sedation & Analgesia (PSA) privileges when learning the above procedures.

**Assessment:**

-The resident is to keep a log of all procedures performed during the month as required by ACGME.

Residents are expected to get the preceptor for the procedure to sign off on this sheet and turn in these Sheets to the Department of Medical Education.

## **Senior Resident Minor Elective Curriculum Child Psychiatry**

### **Patient Care**

The competency of patient care includes:

- communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families
- gather essential and accurate information about their patients
- make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
- develop and carry out patient management plans counsel and educate patients and their families
- use information technology to support patient care decisions and patient education
- perform competently all medical and invasive procedures considered essential for the area of practice
- provide health care services aimed at preventing health problems or maintaining health
- work with health care professionals, including those from other disciplines, to provide patient- focused care

### **Patient Care: Goal**

#### **Patient Care**

**Treatment of patients with acute psychosis, anxiety, behavioral concerns; conversion symptoms, depression, hyperactivity, suicide attempt, suspected child abuse or neglect.**

### **Medical Knowledge**

The competency of Medical Knowledge includes:

- demonstrate an investigatory and analytic thinking approach to clinical situations
- know and apply the basic and clinically supportive sciences which are appropriate to their discipline

### **Medical Knowledge: Goal**

**Demonstrate core knowledge of acute psychosis, anxiety, behavioral concerns; conversion symptoms, depression, hyperactivity, suicide attempt, suspected child abuse or neglect.**

### **Professionalism**

The competency of Professionalism includes:

- demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development
- demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices

- demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities

### **Interpersonal and Communication Skills**

The competency of interpersonal and communication skills include:

- create and sustain a therapeutic and ethically sound relationship with patients
- use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills
- work effectively with others as a member or leader of a health care team or other professional group

## **Senior Resident Major Elective Curriculum Allergy/Immunology**

### **Patient Care**

The competency of patient care includes:

- communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families
- gather essential and accurate information about their patients
- make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
- develop and carry out patient management plans counsel and educate patients and their families
- use information technology to support patient care decisions and patient education
- perform competently all medical and invasive procedures considered essential for the area of practice
- provide health care services aimed at preventing health problems or maintaining health
- work with health care professionals, including those from other disciplines, to provide patient- focused care

### **Patient Care: Goal**

**Provide treatment to patients with allergic rhinitis, angioedema, asthma, food allergies, recurrent infections, serum sickness, urticaria.**

### **Medical Knowledge**

The competency of Medical Knowledge includes:

- demonstrate an investigatory and analytic thinking approach to clinical situations
- know and apply the basic and clinically supportive sciences which are appropriate to their discipline

### **Medical Knowledge: Goal**

**Demonstrate knowledge of allergic rhinitis, angioedema, asthma, food allergies, recurrent infections, serum sickness, urticaria**

### **Professionalism**

The competency of Professionalism includes:

- demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development
- demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices
- demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities

## **Interpersonal and Communication Skills**

The competency of interpersonal and communication skills include:

- create and sustain a therapeutic and ethically sound relationship with patients
- use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills
- work effectively with others as a member or leader of a health care team or other professional group

## **Senior Resident Major Elective Curriculum Cardiology**

### **Patient Care**

The competency of patient care includes:

- communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families
- gather essential and accurate information about their patients
- make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
- develop and carry out patient management plans counsel and educate patients and their families
- use information technology to support patient care decisions and patient education
- perform competently all medical and invasive procedures considered essential for the area of practice
- provide health care services aimed at preventing health problems or maintaining health
- work with health care professionals, including those from other disciplines, to provide patient- focused care

### **Patient Care: Goals**

#### **Patient Care**

**Goal #1:**

**Provide treatment for patients with bacterial endocarditis, cardiomyopathy, congenital heart disease (outpatient management of minor illnesses), congestive heart failure, heart murmurs, Kawasaki disease, palpitations, rheumatic fever.**

**Goal#2:**

**Perform an echocardiograph.**

### **Medical Knowledge**

The competency of Medical Knowledge includes:

- demonstrate an investigatory and analytic thinking approach to clinical situations
- know and apply the basic and clinically supportive sciences which are appropriate to their discipline

### **Medical Knowledge: Goals**

**Goal #1:**

**Demonstrate core knowledge of bacterial endocarditis, cardiomyopathy, congenital heart disease (outpatient management of minor illnesses), congestive heart failure, heart murmurs, Kawasaki disease, palpitations, rheumatic fever.**

**Goal #2:**

**Demonstrate knowledge and use of Echocardiograph.**

## **Professionalism**

The competency of Professionalism includes:

- demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development
- demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices
- demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities

## **Interpersonal and Communication Skills**

The competency of interpersonal and communication skills include:

- create and sustain a therapeutic and ethically sound relationship with patients
- use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills
- work effectively with others as a member or leader of a health care team or other professional group



## Senior Resident Major Elective Curriculum Endocrinology

### Patient Care

The competency of patient care includes:

- communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families
- gather essential and accurate information about their patients
- make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
- develop and carry out patient management plans counsel and educate patients and their families
- use information technology to support patient care decisions and patient education
- perform competently all medical and invasive procedures considered essential for the area of practice
- provide health care services aimed at preventing health problems or maintaining health
- work with health care professionals, including those from other disciplines, to provide patient- focused care

### Patient Care: Goals

#### Patient Care

**Provide treatment of various endocrine disorders: growth disturbance, short stature, heat or cold intolerance, normal and abnormal timing of pubertal changes, polydipsia, polyuria Diabetes mellitus, diabetes insipidus, evaluation for possible hypothyroidism, , gynecomastia, hyperthyroidism, precocious or delayed puberty.**

### Medical Knowledge

The competency of Medical Knowledge includes:

- demonstrate an investigatory and analytic thinking approach to clinical situations
- know and apply the basic and clinically supportive sciences which are appropriate to their discipline

### Medical Knowledge: Goals and Objectives

**Goal #1:**

**Demonstrate core knowledge of growth disturbance, short stature, heat or cold intolerance, normal and abnormal timing of pubertal changes, polydipsia, polyuria Diabetes mellitus, diabetes insipidus, evaluation for possible hypothyroidism, gynecomastia, hyperthyroidism, precocious or delayed puberty.**

## **Professionalism**

The competency of Professionalism includes:

- demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development
- demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices
- demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities

## **Interpersonal and Communication Skills**

The competency of interpersonal and communication skills include:

- create and sustain a therapeutic and ethically sound relationship with patients
- use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills
- work effectively with others as a member or leader of a health care team or other professional group

## Senior Resident Major Elective Curriculum Hematology/Oncology

### **Patient Care**

The competency of patient care includes:

- communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families
- gather essential and accurate information about their patients
- make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
- develop and carry out patient management plans counsel and educate patients and their families
- use information technology to support patient care decisions and patient education
- perform competently all medical and invasive procedures considered essential for the area of practice
- provide health care services aimed at preventing health problems or maintaining health
- work with health care professionals, including those from other disciplines, to provide patient- focused care

### **Patient Care: Goals and Objectives**

**Provide treatment for patients with abnormal bleeding, bruising, hepatosplenomegaly, lymphadenopathy, masses, pallor: Abdominal and mediastinal mass (initial work up), anemia, hemoglobinopathies, leukocytosis, neutropenia, thrombocytopenia mediastinal mass, common malignancies, fever and neutropenia, thrombocytopenia, severe anemia, tumor lysis syndrome, vaso-occlusive crises and other complications of sickle cell disease.**

### **Medical Knowledge**

The competency of Medical Knowledge includes:

- demonstrate an investigatory and analytic thinking approach to clinical situations
- know and apply the basic and clinically supportive sciences which are appropriate to their discipline

### **Medical Knowledge: Goal**

**Demonstrate core knowledge of Abnormal bleeding, bruising, hepatosplenomegaly, lymphadenopathy, masses, pallor: Abdominal and mediastinal mass (initial work up), anemia, hemoglobinopathies, leukocytosis, neutropenia, thrombocytopenia mediastinal mass, common malignancies, fever and neutropenia, thrombocytopenia, severe anemia, tumor lysis syndrome, vaso-occlusive crises and other complications of sickle cell disease.**

## **Professionalism**

The competency of Professionalism includes:

- demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development
- demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices
- demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities

## **Interpersonal and Communication Skills**

The competency of interpersonal and communication skills include:

- create and sustain a therapeutic and ethically sound relationship with patients
- use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills
- work effectively with others as a member or leader of a health care team or other professional group

## **Senior Resident Major Elective Curriculum Neurology**

### **Patient Care**

The competency of patient care includes:

- communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families
- gather essential and accurate information about their patients
- make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
- develop and carry out patient management plans counsel and educate patients and their families
- use information technology to support patient care decisions and patient education
- perform competently all medical and invasive procedures considered essential for the area of practice
- provide health care services aimed at preventing health problems or maintaining health
- work with health care professionals, including those from other disciplines, to provide patient- focused care

### **Patient Care: Goal**

**Provide treatment for patients with delays in developmental milestones, ataxia, change in sensorium, diplopia, headache, head trauma, hearing concerns, gait disturbance, hypotonia, lethargy, seizure, tremor, vertigo, visual disturbance, weakness.**

### **Medical Knowledge**

The competency of Medical Knowledge includes:

- demonstrate an investigatory and analytic thinking approach to clinical situations
- know and apply the basic and clinically supportive sciences which are appropriate to their discipline

### **Medical Knowledge: Goal**

**Demonstrate core knowledge of delays in developmental milestones, ataxia, change in sensorium, diplopia, headache, head trauma, hearing concerns, gait disturbance, hypotonia, lethargy, seizure, tremor, vertigo, visual disturbance, weakness.**

### **Professionalism**

The competency of Professionalism includes:

- demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that  
supercedes self-interest; accountability to patients, society, and the profession; and a commitment to  
excellence and on-going professional development
- demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care,  
confidentiality of patient information, informed consent, and business practices
- demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities

### **Interpersonal and Communication Skills**

The competency of interpersonal and communication skills include:

- create and sustain a therapeutic and ethically sound relationship with patients
- use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills
- work effectively with others as a member or leader of a health care team or other professional group

## **Senior Resident Major Elective Curriculum Pulmonology**

### **Patient Care**

The competency of patient care includes:

- communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families
- gather essential and accurate information about their patients
- make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
- develop and carry out patient management plans counsel and educate patients and their families
- use information technology to support patient care decisions and patient education
- perform competently all medical and invasive procedures considered essential for the area of practice
- provide health care services aimed at preventing health problems or maintaining health
- work with health care professionals, including those from other disciplines, to provide patient- focused care

### **Patient Care: Goals and Objectives**

**Provide treatment for patients with asthma, bronchiolitis, croup, epiglottitis, pneumonia; sinusitis, tracheitis, viral URI and LRI.**

### **Medical Knowledge**

The competency of Medical Knowledge includes:

- demonstrate an investigatory and analytic thinking approach to clinical situations
- know and apply the basic and clinically supportive sciences which are appropriate to their discipline

### **Medical Knowledge: Goals and Objectives**

**Demonstrate core knowledge of Asthma, bronchiolitis, croup, epiglottitis, pneumonia; sinusitis, tracheitis, viral URI and LRI.**

### **Professionalism**

The competency of Professionalism includes:

- demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development
- demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices
- demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities

### **Interpersonal and Communication Skills**

The competency of interpersonal and communication skills include:

- create and sustain a therapeutic and ethically sound relationship with patients
- use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills
- work effectively with others as a member or leader of a health care team or other professional group



## **Senior Resident Minor Elective Curriculum Radiology**

### **Patient Care**

The competency of patient care includes:

- communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families
- gather essential and accurate information about their patients
- make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
- develop and carry out patient management plans counsel and educate patients and their families
- use information technology to support patient care decisions and patient education
- perform competently all medical and invasive procedures considered essential for the area of practice
- provide health care services aimed at preventing health problems or maintaining health
- work with health care professionals, including those from other disciplines, to provide patient- focused care

### **Patient Care: Goal**

**To be able to interpret chest x-rays, extremity x-rays, and sinus films**

### **Medical Knowledge**

The competency of Medical Knowledge includes:

- demonstrate an investigatory and analytic thinking approach to clinical situations
- know and apply the basic and clinically supportive sciences which are appropriate to their discipline

### **Medical Knowledge: Goals and Objectives**

**Demonstrate core knowledge of chest x-rays, extremity x-rays, sinus films**

### **Professionalism**

The competency of Professionalism includes:

- demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development
- demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices

- demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities

### **Interpersonal and Communication Skills**

The competency of interpersonal and communication skills include:

- create and sustain a therapeutic and ethically sound relationship with patients
- use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills
- work effectively with others as a member or leader of a health care team or other professional group

**Resident Curriculum  
PL-2  
Emergency Medicine**

**Patient Care**

The competency of patient care includes:

- communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families
- gather essential and accurate information about their patients
- make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
- develop and carry out patient management plans counsel and educate patients and their families
- use information technology to support patient care decisions and patient education
- perform competently all medical and invasive procedures considered essential for the area of practice
- provide health care services aimed at preventing health problems or maintaining health
- work with health care professionals, including those from other disciplines, to provide patient- focused care

**Patient Care: Goals and Objectives**

**Goal #1: EMS System for Children. Understand the basic principles and utilization of emergency medical services for children**

**Objectives:**

- #1. Describe the organization and utilization of emergency medical systems for children in one's local area, including.
- #2. Demonstrate the ability to activate and use the local EMS for children, including interhospital transport.

**Goal #2: Resuscitation and Stabilization (ED). Assess, resuscitate, and stabilize critically ill or injured children in the Emergency Department (ED) setting in a timely fashion.**

**Objectives:**

- #1. Rapidly recognize and assess emergent patients, such as those in respiratory failure or shock.
- #2. Using resuscitation drugs appropriately

**Goal #3: Common Signs and Symptoms (ED). Evaluate and manage common signs and symptoms in infants, children, and adolescents that present to the ED and urgent care center.**

**Objective:**

- #1. Evaluate and Stabilize patients with signs and symptoms that present in the ED (examples below).  
Dental: pain or trauma of mouth, jaw or tooth; tooth injury or loss  
Surgery/trauma: acute abdomen, burns, lacerations, trauma.

**Goal #4: Common Conditions (ED). Recognize and stabilize common illnesses and injuries that present emergently.**

**Objectives:**

**#1.** Evaluate and manage patients with common diagnoses that present in the ED setting (examples below):

1. Dermatology: acute drug reactions,
2. Ophthalmologic: corneal abrasion, conjunctivitis, infection, ocular foreign body, hyphema, trauma
3. Orthopedic: arthritis, common dislocations, discitis, fractures, gait disturbance, Osgood Slatter's Disease, overuse syndromes, osteomyelitis, septic arthritis, sprains, strains
4. Otolaryngologic: epistaxis, foreign body aspiration, peritonsillar or retropharyngeal abscess
5. Trauma/surgical: burns, closed head injury, dental injuries, intracranial hemorrhages (subdural, epidural, subarachnoid), skull fractures, soft tissue injury (including lacerations, abrasions, and contusions), major trauma to head or face, neck or spine, chest, abdomen, urogenital tract, major vessels or organs (with surgeon/trauma team)
6. Toxicants/environmental injuries: electrical injury, heat and cold injury,
7. ingestion/poisoning (unknown substance or common poisons: acetaminophen, antidepressants, benzodiazepines, carbon monoxide, cocaine, cough and cold medicines, digitoxin, drugs of abuse, hydrocarbons, iron, narcotics, neuroleptics),
8. smoke inhalation,
9. submersion injury/near drowning,
10. Psychiatric: combative patient, conversion reaction, depression, suicide attempt/ideation, panic attacks

**Goal #5: Diagnostic Testing (ED). Use common diagnostic tests and imaging studies appropriately in the ED setting.**

**Objectives:**

**#1.** Demonstrate understanding of common diagnostic tests and imaging studies used in the ED by being able to:

- #1.Explain the indications for and limitations of the study
- #2.Understand the benefits and disadvantages of family presence during procedures.
- #3.Know or be able to locate readily age-appropriate normal values for lab studies.
- #4.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 the utility of tests in various clinical settings.
- #5.Discuss cost and utilization issues.
- #6.Interpret test results in the context of the care of the specific patient.
- #7.Discuss therapeutic options for correction of abnormalities

**#2.** Use appropriately the following laboratory studies when indicated for patients in the ED setting:

1. CBC with differential count, platelets, RBC indices
2. Bacterial, viral, and fungal cultures and rapid screens Serologic tests for infection (e.g., monospot, VDRL, hepatitis)
3. Blood chemistries: electrolytes, calcium, magnesium, phosphate, and glucose
4. Arterial, venous, and capillary blood gases
5. Renal function tests
6. Tests of hepatic function and damage
7. Drug levels and toxic screens
8. Gram stain
9. Wet mount
10. Urinalysis
11. CSF studies
12. Stool studies
13. Coagulation studies
14. Pregnancy test (urine, blood)
15. Other fluid studies (e.g., pleural fluid, joint aspiration fluid)

**#3.** Use the following imaging or radiographic studies when indicated for patients in the ED setting:

1. Plain radiographs of chest, skull, extremity bones, abdomen, cervical spine
2. Other imaging techniques, such as CT, MRI, ultrasound, and nuclear scans (interpretation not expected)
3. Contrast or air enema for suspected intussusception or upper GI series for suspected malrotation

**#4.** Use the following screening and diagnostic studies when indicated for patients in the ED setting:

1. Electrocardiogram
2. Vision screening
3. Appropriate urgent use of echocardiography

**Goal #6: Monitoring and Therapeutic Modalities (ED). Understand how to use physiologic monitoring and special technology and treatment in the ED setting.**

**Objectives:**

**#1.** Demonstrate understanding of the monitoring techniques and special treatments commonly used in the ED by being able to:

1. Discuss indications, contraindications, and complications.
2. Demonstrate proper use of technique or treatment for children of varying ages.
3. Interpret results of monitoring based on method used, age, and clinical situation.

**#2.** Use appropriately the monitoring techniques used in the ED:

1. Physiologic monitoring of temperature, blood pressure, heart rate, respirations
2. Pulse oximetry

**#3.** Utilize appropriately the treatments and techniques used in the ED:

1. Universal precautions
2. Gastrointestinal decontamination for poisoning
3. Administration of nebulized medication
4. Injury, wound and burn care
5. Suturing and topical adhesive
6. Splinting
7. Oxygen delivery systems

**#4.** Demonstrate understanding of the following methods of anesthesia or pain management used in the ED:

1. Methods for recognizing and evaluating pain
2. Topical/local/regional anesthesia
3. ASA classification system
4. Procedural sedation
5. Rapid sequence intubation
6. Sedatives, non-narcotic and narcotic analgesics
7. Behavioral techniques and supportive care
8. Other non-pharmacologic methods of pain control (e.g., distraction techniques and humor therapy)

**Goal #7: Pediatric Competencies in Brief (ED). Demonstrate high standards of professional competence while working with patients in the Emergency Department. [For details see Pediatric**

**Competencies.****Objectives:**

1. 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.
2. Use a logical and appropriate clinical approach to the care of emergency patients, applying principles of evidence-based decision-making and problem-solving, and demonstrating the ability to prioritize. Perform accurate ED triage.
3. Demonstrate the ability to multi-task by providing simultaneous care to multiple patients, with varying levels of acuity and severity of illness.
4. Use appropriate timing of diagnostic and therapeutic interventions.
5. Adjust pace to ED patient acuity, volume and flow
6. Provide sensitive support to patients and families in the ED.
7. Provide sensitive support to critically ill patients and their families; arrange for ongoing support and/or preventive services if needed.
8. Be sensitive to the needs of families who use the ED for minor illness care (e.g., need for better orientation to the health care system, lack of community services or medical home)

**Goal #8: 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.**

**Objectives:**

1. Abscess: I & D of superficial abscesses
2. Bladder: catheterization
3. Burn: acute stabilization of major burn
4. Cardioversion/defibrillation
5. Cervical spine immobilization
6. Conjunctival swab
7. Endotracheal intubation
8. Endotracheal intubation: rapid sequence intubation
9. Ear: cerumen removal
10. Eye: contact lens removal
11. Eye: irrigation
12. Eye: eyelid eversion
13. Eye: patch
14. Eye: fluorescein eye exam
15. Foreign body removal (simple): nose
16. Foreign body removal (simple): ear
17. Foreign body removal (simple): conjunctiva
18. Foreign body removal (simple): subcutaneous
19. Foreign body removal (simple): vagina
20. Gastric lavage
21. Gastric tube placement (OG/NG)
22. Gastrostomy tube replacement
23. Gynecologic evaluation: postpubertal
24. Immobilization techniques for common fractures & sprains
25. Ingrown toe nail treatment
26. Inguinal hernia: simple reduction
27. Intravenous line placement
28. Lumbar puncture
29. Medication delivery: endotracheal
30. Medication delivery: IM/SC/ID

31. Medication delivery: inhaled
32. Medication delivery: IV
33. Medication delivery: rectal
34. Pulmonary function tests: peak flow meter
35. Reduction of nursemaid elbow
36. Reduction/splinting of simple dislocation
37. Sterile technique
38. Subungual hematoma: drainage
39. Suctioning: nares
40. Suctioning: oral pharynx
41. Suctioning: tracheostomy
42. Throat swab
43. Tooth: temporary reinsertion
44. Tracheostomy tube: replacement
45. Urethral swab
46. Venipuncture
47. Ventilation: bag-valve-mask
48. Ventilation support: initiation
49. Anesthesia/analgesia: digital blocks
50. Anesthesia/analgesia: local/topical
51. Anesthesia/analgesia: pain management
52. Wood's lamp examination of skin
53. Wound care and suturing of lacerations
54. Arterial puncture
55. Arthrocentesis

**Goal #9: 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

**Objectives:**

- #1. ECG: emergency interpretation
- #2. Monitoring interpretation: cardiac
- #3. Monitoring interpretation: pulse oximetry
- #4. Monitoring interpretation: respiratory
- #5. Radiologic interpretation: abdominal ultrasound
- #6. Radiologic interpretation: abdominal X-ray
- #7. Radiologic interpretation: cervical spine X-ray
- #8. Radiologic interpretation: chest X-ray
- #9. Radiologic interpretation: CT of head
- #10. Radiologic interpretation: extremity X-ray
- #11. Radiologic interpretation: lateral neck X-ray
- #12. Radiologic interpretation: skeletal X-ray (incl. abuse)
- #13. Radiologic interpretation: sinus films
- #14. Vision screening

## Medical Knowledge

The competency of Medical Knowledge includes:

- demonstrate an investigatory and analytic thinking approach to clinical situations
- know and apply the basic and clinically supportive sciences which are appropriate to their discipline

## **Medical Knowledge: Goals and Objectives**

**Goal #1: Resuscitation and Stabilization (ED). Assess, resuscitate, and stabilize critically ill or injured children in the Emergency Department (ED) setting in a timely fashion.**

### **Objectives:**

#1. Rapidly recognize and assess emergent patients, such as those in respiratory failure or shock.

#2. Using resuscitation drugs appropriately

**Goal #2: Common Signs and Symptoms (ED). Evaluate and manage common signs and symptoms in infants, children, and adolescents that present to the ED and urgent care center.**

### **Objectives:**

#1. Evaluate and Stabilize patients with signs and symptoms that present in the ED setting (examples below).

- Dental: pain or trauma of mouth, jaw or tooth; tooth injury or loss
- Surgery/trauma: acute abdomen, burns, lacerations, trauma.

**Goal #3: Common Conditions (ED). Recognize and stabilize common illnesses and injuries that present emergently.**

### **Objectives:**

#1. Evaluate and manage patients with common diagnoses that present in the ED setting (examples below):

1.Dermatology: acute drug reactions,

2.Ophthalmologic: corneal abrasion, conjunctivitis, infection, ocular foreign body, hyphema, trauma

3.Orthopedic: arthritis, common dislocations, discitis, fractures, gait disturbance, Osgood Slatter's Disease, overuse syndromes, osteomyelitis, septic arthritis, sprains, strains

4.Otolaryngologic: epistaxis, foreign body aspiration, peritonsillar or retropharyngeal abscess

5.Trauma/surgical: burns, closed head injury, dental injuries, intracranial hemorrhages (subdural, epidural, subarachnoid), skull fractures, soft tissue injury (including lacerations, abrasions, and contusions), major trauma to head or face, neck or spine, chest, abdomen, urogenital tract, major vessels or organs (with surgeon/trauma team)

6.Toxicants/environmental injuries: electrical injury, heat and cold injury,

7.ingestion/poisoning (unknown substance or common poisons: acetaminophen, antidepressants, benzodiazepines, carbon monoxide, cocaine, cough and cold medicines, digitoxin, drugs of abuse, hydrocarbons, iron, narcotics, neuroleptics),

8.smoke inhalation,

9.submersion injury/near drowning,

10. Psychiatric: combative patient, conversion reaction, depression, suicide attempt/ideation, panic attacks.

**Goal #4: Diagnostic Testing (ED). Use common diagnostic tests and imaging studies appropriately in the ED setting.**

### **Objectives:**

#1. Demonstrate understanding of common diagnostic tests and imaging studies used in the ED by being able to:

1.Explain the indications for and limitations of the study

2. Understand the benefits and disadvantages of family presence during procedures.

3. Know or be able to locate readily age-appropriate normal values for lab studies.



4. 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 the utility of tests in various clinical settings.
5. Discuss cost and utilization issues.
6. Interpret test results in the context of the care of the specific patient.
7. Discuss therapeutic options for correction of abnormalities

#2. Use appropriately the following laboratory studies when indicated for patients in the ED setting:

1. CBC with differential count, platelets, RBC indices
2. Bacterial, viral, and fungal cultures and rapid screens Serologic tests for infection (e.g., monospot, VDRL, hepatitis)
3. Blood chemistries: electrolytes, calcium, magnesium, phosphate, and glucose
4. Arterial, venous, and capillary blood gases
5. Renal function tests
6. Tests of hepatic function and damage
7. Drug levels and toxic screens
8. Gram stain
9. Wet mount
10. Urinalysis
11. CSF studies
12. Stool studies
13. Coagulation studies
14. Pregnancy test (urine, blood)
15. Other fluid studies (e.g., pleural fluid, joint aspiration fluid)

#3. Use the following imaging or radiographic studies when indicated for patients in the ED setting:

1. Plain radiographs of chest, skull, extremity bones, abdomen, cervical spine
2. Other imaging techniques, such as CT, MRI, ultrasound, and nuclear scans (interpretation not expected)
3. Contrast or air enema for suspected intussusception or upper GI series for suspected malrotation

#4. Use the following screening and diagnostic studies when indicated for patients in the ED setting:

1. Electrocardiogram
2. Vision screening
3. Appropriate urgent use of echocardiography

**Goal #5: Monitoring and Therapeutic Modalities (ED). Understand how to use physiologic monitoring and special technology and treatment in the ED setting.**

**Objectives:**

#1. Demonstrate understanding of the monitoring techniques and special treatments commonly used in the ED by being able to:

- Discuss indications, contraindications, and complications.
- Demonstrate proper use of technique or treatment for children of varying ages.
- Interpret results of monitoring based on method used, age, and clinical situation.

#2. Use appropriately the monitoring techniques used in the ED:

1. Physiologic monitoring of temperature, blood pressure, heart rate, respirations
2. Pulse oximetry

**#3.** Utilize appropriately the treatments and techniques used in the ED:

1. Universal precautions
2. Gastrointestinal decontamination for poisoning
3. Administration of nebulized medication
4. Injury, wound and burn care
5. Suturing and topical adhesive
6. Splinting
7. Oxygen delivery systems

**#4.** Demonstrate understanding of the following methods of anesthesia or pain management used in the ED:

1. Methods for recognizing and evaluating pain
2. Topical/local/regional anesthesia
3. ASA classification system
4. Procedural sedation
5. Rapid sequence intubation
6. Sedatives, non-narcotic and narcotic analgesics
7. Behavioral techniques and supportive care
8. Other non-pharmacologic methods of pain control (e.g., distraction techniques and humor therapy)

**Goal #6: Pediatric Competencies in Brief (ED). Demonstrate high standards of professional competence while working with patients in the Emergency Department. [For details see Pediatric Competencies.]**

**Objectives:**

1. 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.
2. Demonstrate a commitment to acquiring the base of knowledge needed for the care of patients in the ED
3. Demonstrate the ability to efficiently access medical information, evaluate it critically and apply it to pediatric care in the ED.

**Goal #7: 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.

**Objectives:**

1. Abscess: I & D of superficial abscesses
2. Bladder: catheterization
3. Burn: acute stabilization of major burn
4. Cardioversion/defibrillation
5. Cervical spine immobilization
6. Conjunctival swab
7. Endotracheal intubation
8. Endotracheal intubation: rapid sequence intubation
9. Ear: cerumen removal
10. Eye: contact lens removal
11. Eye: irrigation
12. Eye: eyelid eversion
13. Eye: patch
14. Eye: fluorescein eye exam
15. Foreign body removal (simple): nose
16. Foreign body removal (simple): ear
17. Foreign body removal (simple): conjunctiva

- 18.Foreign body removal (simple): subcutaneous
- 19.Foreign body removal (simple): vagina
- 20.Gastric lavage
- 21.Gastric tube placement (OG/NG)
- 22.Gastrostomy tube replacement
- 23.Gynecologic evaluation: postpubertal
- 24.Immobilization techniques for common fractures & sprains
- 25.Ingrown toe nail treatment
- 26.Inguinal hernia: simple reduction
- 27.Intravenous line placement
- 28.Lumbar puncture
- 29.Medication delivery: endotracheal
- 30.Medication delivery: IM/SC/ID
- 31.Medication delivery: inhaled
- 32.Medication delivery: IV
- 33.Medication delivery: rectal
- 34.Pulmonary function tests: peak flow meter
- 35.Reduction of nursemaid elbow
- 36.Reduction/splinting of simple dislocation
- 37.Sterile technique
- 38.Subungual hematoma: drainage
- 39.Suctioning: nares
- 40.Suctioning: oral pharynx
- 41.Suctioning: tracheostomy
- 42.Throat swab
- 43.Tooth: temporary reinsertion
- 44.Tracheostomy tube: replacement
- 45.Urethral swab
- 46.Venipuncture
- 47.Ventilation: bag-valve-mask
- 48.Ventilation support: initiation
- 49.Anesthesia/analgesia: digital blocks
- 50.Anesthesia/analgesia: local/topical
- 51.Anesthesia/analgesia: pain management
- 52.Wood's lamp examination of skin
- 53.Wound care and suturing of lacerations
- 54.Arterial puncture
- 55.Arthrocentesis

**Goal #8: 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

**Objectives:**

- #1. ECG: emergency interpretation
- #2.Monitoring interpretation: cardiac
- #3.Monitoring interpretation: pulse oximetry
- #4. Monitoring interpretation: respiratory
- #5.Radiologic interpretation: abdominal ultrasound
- #6.Radiologic interpretation: abdominal X-ray
- #7.Radiologic interpretation: cervical spine X-ray
- #8.Radiologic interpretation: chest X-ray
- #9.Radiologic interpretation: CT of head
- #10.Radiologic interpretation: extremity X-ray
- #11.Radiologic interpretation: lateral neck X-ray

- #12. Radiologic interpretation: skeletal X-ray (incl. abuse)
- #13. Radiologic interpretation: sinus films
- #14. Vision screening

## Practice- Based Learning and Improvement

The competency of Practice- Based Learning and Improvement includes:

- analyze practice experience and perform practice-based improvement activities using a systematic methodology
- locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems
- obtain and use information about their own population of patients and the larger population from which their patients are drawn
- apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness
- use information technology to manage information, access on-line medical information; and support their own education
- facilitate the learning of students and other health care professionals

## Practice- Based Learning and Improvement :Goals and Objectives

**Goal #1: Pediatric Competencies in Brief (ED). Demonstrate high standards of professional competence while working with patients in the Emergency Department. [For details see Pediatric Competencies.**

### Objectives:

1. 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.
2. Use scientific methods and evidence to investigate, evaluate and improve patient care in ED
3. Identify personal learning needs, systematically organize relevant information resources for future reference, and plan for continuing acquisition of knowledge and skills.

## Systems Based Practice

The competency of System Based Practice includes:

- understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice
  - know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources
  - practice cost-effective health care and resource allocation that does not compromise quality of care
  - advocate for quality patient care and assist patients in dealing with system complexities
- know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance

## Systems Based Practice :Goals and Objectives

**Goal #1: EMS System for Children. Understand the basic principles and utilization of emergency medical services for children**

**Objectives:**

- #1. Describe the organization and utilization of emergency medical systems for children in one's local area, including.
- #2. Demonstrate the ability to activate and use the local EMS for children, including interhospital transport.

**Goal #2: Pediatric Competencies in Brief (ED). Demonstrate high standards of professional competence while working with patients in the Emergency Department. [For details see Pediatric Competencies.**

**Objectives:**

- #1. Understand how to practice high-quality health care and advocate for patients within the context of the health care system.
- #2. Demonstrate sensitivity to the costs of care in the ED setting and take steps to minimize costs without compromising quality
- #3. Recognize and advocate for families who need assistance to deal with system complexities. Recognize one's limits and those of the system; take steps to avoid medical errors.

## Professionalism

The competency of Professionalism includes:

- demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development
- demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices
- demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities

## Professionalism :Goals and Objectives

**Goal #1: Resuscitation and Stabilization (ED). Assess, resuscitate, and stabilize critically ill or injured children in the Emergency Department (ED) setting in a timely fashion.**

**Objectives:**

- #1. Rapidly recognize and assess emergent patients, such as those in respiratory failure or shock.
- #2. Using resuscitation drugs appropriately

**Goal #2: Common Signs and Symptoms (ED). Evaluate and manage common signs and symptoms in infants, children, and adolescents that present to the ED and urgent care center.**

**Objectives:**

#1. Evaluate and Stabilize patients with signs and symptoms that present in the ED setting (examples below).

- Dental: pain or trauma of mouth, jaw or tooth; tooth injury or loss
- Surgery/trauma: acute abdomen, burns, lacerations, trauma.

**Goal #3: Common Conditions (ED). Recognize and stabilize common illnesses and injuries that present emergently.**

**Objectives:**

#1. Evaluate and manage patients with common diagnoses that present in the ED setting (examples below):

- 1.Dermatology: acute drug reactions,
- 2.Ophthalmologic: corneal abrasion, conjunctivitis, infection, ocular foreign body, hyphema, trauma
- 3.Orthopedic: arthritis, common dislocations, discitis, fractures, gait disturbance, Osgood Slatter's Disease, overuse syndromes, osteomyelitis, septic arthritis, sprains, strains
- 4.Otolaryngologic: epistaxis, foreign body aspiration, peritonsillar or retropharyngeal abscess
- 5.Trauma/surgical: burns, closed head injury, dental injuries, intracranial hemorrhages (subdural, epidural, subarachnoid), skull fractures, soft tissue injury (including lacerations, abrasions, and contusions), major trauma to head or face, neck or spine, chest, abdomen, urogenital tract, major vessels or organs (with surgeon/trauma team)
- 6.Toxicants/environmental injuries: electrical injury, heat and cold injury,
- 7.ingestion/poisoning (unknown substance or common poisons: acetaminophen, antidepressants, benzodiazepines, carbon monoxide, cocaine, cough and cold medicines, digitoxin, drugs of abuse, hydrocarbons, iron, narcotics, neuroleptics),
- 8.smoke inhalation,
- 9.submersion injury/near drowning,
10. Psychiatric: combative patient, conversion reaction, depression, suicide attempt/ideation, panic attacks.

**Goal #4: Diagnostic Testing (ED). Use common diagnostic tests and imaging studies appropriately in the ED setting.**

**Objectives:**

#1. Demonstrate understanding of common diagnostic tests and imaging studies used in the ED by being able to:

- #1.Explain the indications for and limitations of the study
- #2.Understand the benefits and disadvantages of family presence during procedures.
- #3.Know or be able to locate readily age-appropriate normal values for lab studies.
- #4.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 the utility of tests in various clinical settings.
- #5.Discuss cost and utilization issues.
- #6.Interpret test results in the context of the care of the specific patient.
- #7.Discuss therapeutic options for correction of abnormalities

#2. Use appropriately the following laboratory studies when indicated for patients in the ED setting:

1. CBC with differential count, platelets, RBC indices
2. Bacterial, viral, and fungal cultures and rapid screens Serologic tests for infection (e.g., monospot, VDRL, hepatitis)
3. Blood chemistries: electrolytes, calcium, magnesium, phosphate, and glucose
4. Arterial, venous, and capillary blood gases
5. Renal function tests
6. Tests of hepatic function and damage
7. Drug levels and toxic screens
8. Gram stain
9. Wet mount
10. Urinalysis
11. CSF studies
12. Stool studies
13. Coagulation studies
14. Pregnancy test (urine, blood)
15. Other fluid studies (e.g., pleural fluid, joint aspiration fluid)

**#3.** Use the following imaging or radiographic studies when indicated for patients in the ED setting:

1. Plain radiographs of chest, skull, extremity bones, abdomen, cervical spine
2. Other imaging techniques, such as CT, MRI, ultrasound, and nuclear scans (interpretation not expected)
3. Contrast or air enema for suspected intussusception or upper GI series for suspected malrotation

**#4.** Use the following screening and diagnostic studies when indicated for patients in the ED setting:

1. Electrocardiogram
2. Vision screening
3. Appropriate urgent use of echocardiography

**Goal #5: Monitoring and Therapeutic Modalities (ED). Understand how to use physiologic monitoring and special technology and treatment in the ED setting.**

**Objectives:**

**#1.** Demonstrate understanding of the monitoring techniques and special treatments commonly used in the ED by being able to:

1. Discuss indications, contraindications, and complications.
2. Demonstrate proper use of technique or treatment for children of varying ages.
3. Interpret results of monitoring based on method used, age, and clinical situation.

**#2.** Use appropriately the monitoring techniques used in the ED:

1. Physiologic monitoring of temperature, blood pressure, heart rate, respirations
2. Pulse oximetry

**#3.** Utilize appropriately the treatments and techniques used in the ED:

1. Universal precautions
2. Gastrointestinal decontamination for poisoning
3. Administration of nebulized medication
4. Injury, wound and burn care
5. Suturing and topical adhesive
6. Splinting
7. Oxygen delivery systems

**#4.** Demonstrate understanding of the following methods of anesthesia or pain management used in the ED:

1. Methods for recognizing and evaluating pain
2. Topical/local/regional anesthesia
3. ASA classification system
4. Procedural sedation
5. Rapid sequence intubation
6. Sedatives, non-narcotic and narcotic analgesics
7. Behavioral techniques and supportive care
8. Other non-pharmacologic methods of pain control (e.g., distraction techniques and humor therapy)

**Goal #6: Pediatric Competencies in Brief (ED). Demonstrate high standards of professional competence while working with patients in the Emergency Department. [For details see Pediatric Competencies.**

**Objectives:**

#1. Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to diversity.

#2. Demonstrate a commitment to professionalism despite the pace and stress of the ED setting.

#3. Adhere to ethical and legal principles, and be sensitive to diversity. Identify and describe potential ethical dilemmas that one may encounter in the ED (e.g., such as resuscitation of patients with little hope of recovery; treatment of disabled patients; providing confidential care to mature minors [pregnancy termination, STDs, substance abuse]; foregoing life-sustaining treatment; identifying and referring organ donors).

#4. Discuss key principles and identify resources for information about legal issues of importance to practice in the ED (e.g., emergency care for indigent patients; laws regarding inter-hospital patient transfer; consent-to-treat issues in the emergency treatment of minors; rights of parents to refuse treatment and legal options of providers; reporting of child abuse and neglect; death reports; and obligations of physicians in the ED to facilitate follow-up care).

## **Interpersonal and Communication Skills**

The competency of interpersonal and communication skills include:

- create and sustain a therapeutic and ethically sound relationship with patients
- use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills
- work effectively with others as a member or leader of a health care team or other professional group

## **Interpersonal and Communication Skills: Goals and Objectives**

**Goal #1: Resuscitation and Stabilization (ED). Assess, resuscitate, and stabilize critically ill or injured children in the Emergency Department (ED) setting in a timely fashion.**

**Objectives:**

#1. Rapidly recognize and assess emergent patients, such as those in respiratory failure or shock.

#2. Using resuscitation drugs appropriately

**Goal #2: Common Signs and Symptoms (ED). Evaluate and manage common signs and symptoms in infants, children, and adolescents that present to the ED and urgent care center.**

**Objective:**

#1. Evaluate and Stabilize patients with signs and symptoms that present in the ED setting (examples below).

- Dental: pain or trauma of mouth, jaw or tooth; tooth injury or loss
- Surgery/trauma: acute abdomen, burns, lacerations, trauma.

**Goal #3: Common Conditions (ED). Recognize and stabilize common illnesses and injuries that present emergently.**

**Objectives:**

#1. Evaluate and manage patients with common diagnoses that present in the ED setting (examples below):



1. Dermatology: acute drug reactions,
2. Ophthalmologic: corneal abrasion, conjunctivitis, infection, ocular foreign body, hyphema, trauma
3. Orthopedic: arthritis, common dislocations, discitis, fractures, gait disturbance, Osgood Slatter's Disease, overuse syndromes, osteomyelitis, septic arthritis, sprains, strains
4. Otolaryngologic: epistaxis, foreign body aspiration, peritonsillar or retropharyngeal abscess
5. Trauma/surgical: burns, closed head injury, dental injuries, intracranial hemorrhages (subdural, epidural, subarachnoid), skull fractures, soft tissue injury (including lacerations, abrasions, and contusions), major trauma to head or face, neck or spine, chest, abdomen, urogenital tract, major vessels or organs (with surgeon/trauma team)
6. Toxicants/environmental injuries: electrical injury, heat and cold injury,
7. Ingestion/poisoning (unknown substance or common poisons: acetaminophen, antidepressants, benzodiazepines, carbon monoxide, cocaine, cough and cold medicines, digitoxin, drugs of abuse, hydrocarbons, iron, narcotics, neuroleptics),
8. Smoke inhalation,
9. Submersion injury/near drowning,
10. Psychiatric: combative patient, conversion reaction, depression, suicide attempt/ideation, panic attacks.

**Goal #4: Diagnostic Testing (ED). Use common diagnostic tests and imaging studies appropriately in the ED setting.**

**Objectives:**

#1. Demonstrate understanding of common diagnostic tests and imaging studies used in the ED by being able to:

- #1. Explain the indications for and limitations of the study
- #2. Understand the benefits and disadvantages of family presence during procedures.
- #3. Know or be able to locate readily age-appropriate normal values for lab studies.
- #4. 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 the utility of tests in various clinical settings.
- #5. Discuss cost and utilization issues.
- #6. Interpret test results in the context of the care of the specific patient.
- #7. Discuss therapeutic options for correction of abnormalities

#2. Use appropriately the following laboratory studies when indicated for patients in the ED setting:

1. CBC with differential count, platelets, RBC indices
2. Bacterial, viral, and fungal cultures and rapid screens Serologic tests for infection (e.g., monospot, VDRL, hepatitis)
3. Blood chemistries: electrolytes, calcium, magnesium, phosphate, and glucose
4. Arterial, venous, and capillary blood gases
5. Renal function tests
6. Tests of hepatic function and damage
7. Drug levels and toxic screens
8. Gram stain
9. Wet mount
10. Urinalysis
11. CSF studies
12. Stool studies
13. Coagulation studies
14. Pregnancy test (urine, blood)
15. Other fluid studies (e.g., pleural fluid, joint aspiration fluid)

**#3.** Use the following imaging or radiographic studies when indicated for patients in the ED setting

1. Plain radiographs of chest, skull, extremity bones, abdomen, cervical spine
2. Other imaging techniques, such as CT, MRI, ultrasound, and nuclear scans (interpretation not expected)
3. Contrast or air enema for suspected intussusception or upper GI series for suspected malrotation

**#4.** Use the following screening and diagnostic studies when indicated for patients in the ED setting:

1. Electrocardiogram
2. Vision screening
3. Appropriate urgent use of echocardiography

**Goal #5: Monitoring and Therapeutic Modalities (ED). Understand how to use physiologic monitoring and special technology and treatment in the ED setting.**

**Objectives:**

**#1.** Demonstrate understanding of the monitoring techniques and special treatments commonly used in the ED by being able to:

1. Discuss indications, contraindications, and complications.
2. Demonstrate proper use of technique or treatment for children of varying ages.
3. Interpret results of monitoring based on method used, age, and clinical situation.

**#2.** Use appropriately the monitoring techniques used in the ED:

1. Physiologic monitoring of temperature, blood pressure, heart rate, respirations
2. Pulse oximetry

**#3.** Utilize appropriately the treatments and techniques used in the ED:

1. Universal precautions
2. Gastrointestinal decontamination for poisoning
3. Administration of nebulized medication
4. Injury, wound and burn care
5. Suturing and topical adhesive
6. Splinting
7. Oxygen delivery systems

**#4.** Demonstrate understanding of the following methods of anesthesia or pain management used in the ED:

1. Methods for recognizing and evaluating pain
2. Topical/local/regional anesthesia
3. ASA classification system
4. Procedural sedation
5. Rapid sequence intubation
6. Sedatives, non-narcotic and narcotic analgesics
7. Behavioral techniques and supportive care
8. Other non-pharmacologic methods of pain control (e.g., distraction techniques and humor therapy)

**Goal #6: Pediatric Competencies in Brief (ED). Demonstrate high standards of professional competence while working with patients in the Emergency Department. [For details see Pediatric Competencies.**

**Objectives:**

- #1. Demonstrate interpersonal and communication skills that result in information exchange and partnering with patients, their families and professional associates
- #2. Provide effective patient education, including reassurance, for a condition(s) commonly seen in the ED.
- #3. Participate effectively as part of an interdisciplinary team in the ED to create and sustain information exchange, including communication with the primary care physician.
- #4. Provide case-based teaching related to clinical situations encountered in ED (for students, colleagues, other professionals and/or laypersons). Maintain accurate, timely and legally appropriate medical records in the ED and urgent care settings

**Resident Curriculum  
PL-3  
Emergency Medicine**

**The PL-3 resident will demonstrate all the competencies expected at the end of the PL-2 rotation with the expectation that they will function at a higher level of autonomy, skill and efficiency especially in patient care, system based practice and professionalism.**

**The PL-3 resident will demonstrate competence in recognizing patients who need immediate attention and prioritizing their order of care thereby demonstrating competence in medical knowledge, patient care, practice based learning, interpersonal and communication skills.**

**The PL-3 resident will demonstrate competence performing the more advanced emergency department skills/procedures.**

**Patient Care**

The competency of patient care includes:

- communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families
- gather essential and accurate information about their patients
- make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
- develop and carry out patient management plans counsel and educate patients and their families
- use information technology to support patient care decisions and patient education
- perform competently all medical and invasive procedures considered essential for the area of practice
- provide health care services aimed at preventing health problems or maintaining health
- work with health care professionals, including those from other disciplines, to provide patient- focused care

**Patient Care: Goals and Objectives**

**Goal #1: EMS System for Children. Understand the basic principles and utilization of emergency medical services for children**

**Objectives:**

- #1. Describe the organization and utilization of emergency medical systems for children in one's local area, including.
- #2. Demonstrate the ability to activate and use the local EMS for children, including interhospital transport.

**Goal #2: Resuscitation and Stabilization (ED). Assess, resuscitate, and stabilize critically ill or injured children in the Emergency Department (ED) setting in a timely fashion.**

**Objectives:**

- #1. Rapidly recognize and assess emergent patients, such as those in respiratory failure or shock.
- #2. Using resuscitation drugs appropriately

**Goal #3: Common Signs and Symptoms (ED). Evaluate and manage common signs and symptoms in infants, children, and adolescents that present to the ED and urgent care center.**

**Objective:**

- #1. Evaluate and Stabilize patients with signs and symptoms that present in the ED (examples below).  
Dental: pain or trauma of mouth, jaw or tooth; tooth injury or loss  
Surgery/trauma: acute abdomen, burns, lacerations, trauma.

**Goal #4: Common Conditions (ED). Recognize and stabilize common illnesses and injuries that present emergently.**

**Objectives:**

- #1. Evaluate and manage patients with common diagnoses that present in the ED setting (examples below):

1. Dermatology: acute drug reactions,
2. Ophthalmologic: corneal abrasion, conjunctivitis, infection, ocular foreign body, hyphema, trauma
3. Orthopedic: arthritis, common dislocations, discitis, fractures, gait disturbance, Osgood Slatter's Disease, overuse syndromes, osteomyelitis, septic arthritis, sprains, strains
4. Otolaryngologic: epistaxis, foreign body aspiration, peritonsillar or retropharyngeal abscess
5. Trauma/surgical: burns, closed head injury, dental injuries, intracranial hemorrhages (subdural, epidural, subarachnoid), skull fractures, soft tissue injury (including lacerations, abrasions, and contusions), major trauma to head or face, neck or spine, chest, abdomen, urogenital tract, major vessels or organs (with surgeon/trauma team)
6. Toxicants/environmental injuries: electrical injury, heat and cold injury,
7. ingestion/poisoning (unknown substance or common poisons: acetaminophen, antidepressants, benzodiazepines, carbon monoxide, cocaine, cough and cold medicines, digitoxin, drugs of abuse, hydrocarbons, iron, narcotics, neuroleptics),
8. smoke inhalation,
9. submersion injury/near drowning,
10. Psychiatric: combative patient, conversion reaction, depression, suicide attempt/ideation, panic attacks

**Goal #5: Diagnostic Testing (ED). Use common diagnostic tests and imaging studies appropriately in the ED setting.**

**Objectives:**

- #1. Demonstrate understanding of common diagnostic tests and imaging studies used in the ED by being able to:
  - #1.Explain the indications for and limitations of the study
  - #2.Understand the benefits and disadvantages of family presence during procedures.
  - #3.Know or be able to locate readily age-appropriate normal values for lab studies.
  - #4.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 the utility of tests in various clinical settings.
  - #5.Discuss cost and utilization issues.
  - #6.Interpret test results in the context of the care of the specific patient.
  - #7.Discuss therapeutic options for correction of abnormalities

- #2. Use appropriately the following laboratory studies when indicated for patients in the ED setting:

1. CBC with differential count, platelets, RBC indices
2. Bacterial, viral, and fungal cultures and rapid screens Serologic tests for infection (e.g., monospot, VDRL, hepatitis)
3. Blood chemistries: electrolytes, calcium, magnesium, phosphate, and glucose
4. Arterial, venous, and capillary blood gases
5. Renal function tests
6. Tests of hepatic function and damage
7. Drug levels and toxic screens
8. Gram stain
9. Wet mount
10. Urinalysis
11. CSF studies
12. Stool studies
13. Coagulation studies
14. Pregnancy test (urine, blood)
15. Other fluid studies (e.g., pleural fluid, joint aspiration fluid)

**#3.** Use the following imaging or radiographic studies when indicated for patients in the ED setting:

1. Plain radiographs of chest, skull, extremity bones, abdomen, cervical spine
2. Other imaging techniques, such as CT, MRI, ultrasound, and nuclear scans (interpretation not expected)
3. Contrast or air enema for suspected intussusception or upper GI series for suspected malrotation

**#4.** Use the following screening and diagnostic studies when indicated for patients in the ED setting:

1. Electrocardiogram
2. Vision screening
3. Appropriate urgent use of echocardiography

**Goal #6: Monitoring and Therapeutic Modalities (ED). Understand how to use physiologic monitoring and special technology and treatment in the ED setting.**

**Objectives:**

**#1.** Demonstrate understanding of the monitoring techniques and special treatments commonly used in the ED by being able to:

1. Discuss indications, contraindications, and complications.
2. Demonstrate proper use of technique or treatment for children of varying ages.
3. Interpret results of monitoring based on method used, age, and clinical situation.

**#2.** Use appropriately the monitoring techniques used in the ED:

1. Physiologic monitoring of temperature, blood pressure, heart rate, respirations
2. Pulse oximetry

**#3.** Utilize appropriately the treatments and techniques used in the ED:

1. Universal precautions
2. Gastrointestinal decontamination for poisoning
3. Administration of nebulized medication
4. Injury, wound and burn care
5. Suturing and topical adhesive
6. Splinting

7. Oxygen delivery systems

**#4. Demonstrate understanding of the following methods of anesthesia or pain management used in the ED:**

1. Methods for recognizing and evaluating pain
2. Topical/local/regional anesthesia
3. ASA classification system
4. Procedural sedation
5. Rapid sequence intubation
6. Sedatives, non-narcotic and narcotic analgesics
7. Behavioral techniques and supportive care
8. Other non-pharmacologic methods of pain control (e.g., distraction techniques and humor therapy)

**Goal #7: Pediatric Competencies in Brief (ED). Demonstrate high standards of professional competence while working with patients in the Emergency Department. [For details see Pediatric Competencies.**

**Objectives:**

1. 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.
2. Use a logical and appropriate clinical approach to the care of emergency patients, applying principles of evidence-based decision-making and problem-solving, and demonstrating the ability to prioritize. Perform accurate ED triage.
3. Demonstrate the ability to multi-task by providing simultaneous care to multiple patients, with varying levels of acuity and severity of illness.
4. Use appropriate timing of diagnostic and therapeutic interventions.
5. Adjust pace to ED patient acuity, volume and flow
6. Provide sensitive support to patients and families in the ED.
7. Provide sensitive support to critically ill patients and their families; arrange for ongoing support and/or preventive services if needed.
8. Be sensitive to the needs of families who use the ED for minor illness care (e.g., need for better orientation to the health care system, lack of community services or medical home)

**Goal #8: 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.**

**Objectives:**

1. Abscess: I & D of superficial abscesses
2. Bladder: catheterization
3. Burn: acute stabilization of major burn
4. Cardioversion/defibrillation
5. Cervical spine immobilization
6. Conjunctival swab
7. Endotracheal intubation
8. Endotracheal intubation: rapid sequence intubation
9. Ear: cerumen removal
10. Eye: contact lens removal
11. Eye: irrigation
12. Eye: eyelid eversion
13. Eye: patch
14. Eye: fluorescein eye exam

15. Foreign body removal (simple): nose
16. Foreign body removal (simple): ear
17. Foreign body removal (simple): conjunctiva
18. Foreign body removal (simple): subcutaneous
19. Foreign body removal (simple): vagina
20. Gastric lavage
21. Gastric tube placement (OG/NG)
22. Gastrostomy tube replacement
23. Gynecologic evaluation: postpubertal
24. Immobilization techniques for common fractures & sprains
25. Ingrown toe nail treatment
26. Inguinal hernia: simple reduction
27. Intravenous line placement
28. Lumbar puncture
29. Medication delivery: endotracheal
30. Medication delivery: IM/SC/ID
31. Medication delivery: inhaled
32. Medication delivery: IV
33. Medication delivery: rectal
34. Pulmonary function tests: peak flow meter
35. Reduction of nursemaid elbow
36. Reduction/splinting of simple dislocation
37. Sterile technique
38. Subungual hematoma: drainage
39. Suctioning: nares
40. Suctioning: oral pharynx
41. Suctioning: tracheostomy
42. Throat swab
43. Tooth: temporary reinsertion
44. Tracheostomy tube: replacement
45. Urethral swab
46. Venipuncture
47. Ventilation: bag-valve-mask
48. Ventilation support: initiation
49. Anesthesia/analgesia: digital blocks
50. Anesthesia/analgesia: local/topical
51. Anesthesia/analgesia: pain management
52. Wood's lamp examination of skin
53. Wound care and suturing of lacerations
54. Arterial puncture
55. Arthrocentesis

**Goal #9: 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

**Objectives:**

- #1. ECG: emergency interpretation
- #2. Monitoring interpretation: cardiac
- #3. Monitoring interpretation: pulse oximetry
- #4. Monitoring interpretation: respiratory
- #5. Radiologic interpretation: abdominal ultrasound
- #6. Radiologic interpretation: abdominal X-ray
- #7. Radiologic interpretation: cervical spine X-ray
- #8. Radiologic interpretation: chest X-ray
- #9. Radiologic interpretation: CT of head



- #10. Radiologic interpretation: extremity X-ray
- #11. Radiologic interpretation: lateral neck X-ray
- #12. Radiologic interpretation: skeletal X-ray (incl. abuse)
- #13. Radiologic interpretation: sinus films
- #14. Vision screening

## Medical Knowledge

The competency of Medical Knowledge includes:

- demonstrate an investigatory and analytic thinking approach to clinical situations
- know and apply the basic and clinically supportive sciences which are appropriate to their discipline

## Medical Knowledge: Goals and Objectives

**Goal #1: Resuscitation and Stabilization (ED). Assess, resuscitate, and stabilize critically ill or injured children in the Emergency Department (ED) setting in a timely fashion.**

### Objectives:

- #1. Rapidly recognize and assess emergent patients, such as those in respiratory failure or shock.
- #2. Using resuscitation drugs appropriately

**Goal #2: Common Signs and Symptoms (ED). Evaluate and manage common signs and symptoms in infants, children, and adolescents that present to the ED and urgent care center.**

### Objectives:

#1. Evaluate and Stabilize patients with signs and symptoms that present in the ED setting (examples below).

- Dental: pain or trauma of mouth, jaw or tooth; tooth injury or loss
- Surgery/trauma: acute abdomen, burns, lacerations, trauma.

**Goal #3: Common Conditions (ED). Recognize and stabilize common illnesses and injuries that present emergently.**

### Objectives:

#1. Evaluate and manage patients with common diagnoses that present in the ED setting (examples below):

1. Dermatology: acute drug reactions,
2. Ophthalmologic: corneal abrasion, conjunctivitis, infection, ocular foreign body, hyphema, trauma
3. Orthopedic: arthritis, common dislocations, discitis, fractures, gait disturbance, Osgood Slatter's Disease, overuse syndromes, osteomyelitis, septic arthritis, sprains, strains
4. Otolaryngologic: epistaxis, foreign body aspiration, peritonsillar or retropharyngeal abscess
5. Trauma/surgical: burns, closed head injury, dental injuries, intracranial hemorrhages (subdural, epidural, subarachnoid), skull fractures, soft tissue injury (including lacerations, abrasions, and contusions), major trauma to head or face, neck or spine, chest, abdomen, urogenital tract, major vessels or organs (with surgeon/trauma team)
6. Toxicants/environmental injuries: electrical injury, heat and cold injury,
7. Ingestion/poisoning (unknown substance or common poisons: acetaminophen, antidepressants, benzodiazepines, carbon monoxide, cocaine, cough and cold medicines, digitoxin, drugs of abuse,

hydrocarbons, iron, narcotics, neuroleptics),

8.smoke inhalation,

9.submersion injury/near drowning,

10. Psychiatric: combative patient, conversion reaction, depression, suicide attempt/ideation, panic attacks.

**Goal #4: Diagnostic Testing (ED). Use common diagnostic tests and imaging studies appropriately in the ED setting.**

**Objectives:**

**#1.** Demonstrate understanding of common diagnostic tests and imaging studies used in the ED by being able to:

- 1.Explain the indications for and limitations of the study
2. Understand the benefits and disadvantages of family presence during procedures.
3. Know or be able to locate readily age-appropriate normal values for lab studies.
4. 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 the utility of tests in various clinical settings.
5. Discuss cost and utilization issues.
6. Interpret test results in the context of the care of the specific patient.
- 7.Discuss therapeutic options for correction of abnormalities

**#2.** Use appropriately the following laboratory studies when indicated for patients in the ED setting:

1. CBC with differential count, platelets, RBC indices
2. Bacterial, viral, and fungal cultures and rapid screens Serologic tests for infection (e.g., monospot, VDRL, hepatitis)
3. Blood chemistries: electrolytes, calcium, magnesium, phosphate, and glucose
4. Arterial, venous, and capillary blood gases
5. Renal function tests
6. Tests of hepatic function and damage
7. Drug levels and toxic screens
8. Gram stain
9. Wet mount
10. Urinalysis
11. CSF studies
12. Stool studies
13. Coagulation studies
14. Pregnancy test (urine, blood)
15. Other fluid studies (e.g., pleural fluid, joint aspiration fluid)

**#3.** Use the following imaging or radiographic studies when indicated for patients in the ED setting:

1. Plain radiographs of chest, skull, extremity bones, abdomen, cervical spine
2. Other imaging techniques, such as CT, MRI, ultrasound, and nuclear scans (interpretation not expected)
3. Contrast or air enema for suspected intussusception or upper GI series for suspected malrotation

**#4.** Use the following screening and diagnostic studies when indicated for patients in the ED setting:

1. Electrocardiogram
2. Vision screening

3. Appropriate urgent use of echocardiography

**Goal #5: Monitoring and Therapeutic Modalities (ED). Understand how to use physiologic monitoring and special technology and treatment in the ED setting.**

**Objectives:**

#1. Demonstrate understanding of the monitoring techniques and special treatments commonly used in the ED by being able to:

- Discuss indications, contraindications, and complications.
- Demonstrate proper use of technique or treatment for children of varying ages.
- Interpret results of monitoring based on method used, age, and clinical situation.

#2. Use appropriately the monitoring techniques used in the ED:

1. Physiologic monitoring of temperature, blood pressure, heart rate, respirations
2. Pulse oximetry

#3. Utilize appropriately the treatments and techniques used in the ED:

1. Universal precautions
2. Gastrointestinal decontamination for poisoning
3. Administration of nebulized medication
4. Injury, wound and burn care
5. Suturing and topical adhesive
6. Splinting
7. Oxygen delivery systems

#4. Demonstrate understanding of the following methods of anesthesia or pain management used in the ED:

1. Methods for recognizing and evaluating pain
2. Topical/local/regional anesthesia
3. ASA classification system
4. Procedural sedation
5. Rapid sequence intubation
6. Sedatives, non-narcotic and narcotic analgesics
7. Behavioral techniques and supportive care
8. Other non-pharmacologic methods of pain control (e.g., distraction techniques and humor therapy)

**Goal #6: Pediatric Competencies in Brief (ED). Demonstrate high standards of professional competence while working with patients in the Emergency Department. [For details see Pediatric Competencies.]**

**Objectives:**

1. 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.
2. Demonstrate a commitment to acquiring the base of knowledge needed for the care of patients in the ED
3. Demonstrate the ability to efficiently access medical information, evaluate it critically and apply it to pediatric care in the ED.

**Goal #7: 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.

**Objectives:**

1. Abscess: I & D of superficial abscesses
2. Bladder: catheterization
3. Burn: acute stabilization of major burn
4. Cardioversion/defibrillation
5. Cervical spine immobilization
6. Conjunctival swab
7. Endotracheal intubation
8. Endotracheal intubation: rapid sequence intubation
9. Ear: cerumen removal
10. Eye: contact lens removal
11. Eye: irrigation
12. Eye: eyelid eversion
13. Eye: patch
14. Eye: fluorescein eye exam
15. Foreign body removal (simple): nose
16. Foreign body removal (simple): ear
17. Foreign body removal (simple): conjunctiva
18. Foreign body removal (simple): subcutaneous
19. Foreign body removal (simple): vagina
20. Gastric lavage
21. Gastric tube placement (OG/NG)
22. Gastrostomy tube replacement
23. Gynecologic evaluation: postpubertal
24. Immobilization techniques for common fractures & sprains
25. Ingrown toe nail treatment
26. Inguinal hernia: simple reduction
27. Intravenous line placement
28. Lumbar puncture
29. Medication delivery: endotracheal
30. Medication delivery: IM/SC/ID
31. Medication delivery: inhaled
32. Medication delivery: IV
33. Medication delivery: rectal
34. Pulmonary function tests: peak flow meter
35. Reduction of nursemaid elbow
36. Reduction/splinting of simple dislocation
37. Sterile technique
38. Subungual hematoma: drainage
39. Suctioning: nares
40. Suctioning: oral pharynx
41. Suctioning: tracheostomy
42. Throat swab
43. Tooth: temporary reinsertion
44. Tracheostomy tube: replacement
45. Urethral swab
46. Venipuncture
47. Ventilation: bag-valve-mask
48. Ventilation support: initiation
49. Anesthesia/analgesia: digital blocks
50. Anesthesia/analgesia: local/topical
51. Anesthesia/analgesia: pain management
52. Wood's lamp examination of skin
53. Wound care and suturing of lacerations
54. Arterial puncture
55. Arthrocentesis

**Goal #8: 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

**Objectives:**

- #1. ECG: emergency interpretation
- #2. Monitoring interpretation: cardiac
- #3. Monitoring interpretation: pulse oximetry
- #4. Monitoring interpretation: respiratory
- #5. Radiologic interpretation: abdominal ultrasound
- #6. Radiologic interpretation: abdominal X-ray
- #7. Radiologic interpretation: cervical spine X-ray
- #8. Radiologic interpretation: chest X-ray
- #9. Radiologic interpretation: CT of head
- #10. Radiologic interpretation: extremity X-ray
- #11. Radiologic interpretation: lateral neck X-ray
- #12. Radiologic interpretation: skeletal X-ray (incl. abuse)
- #13. Radiologic interpretation: sinus films
- #14. Vision screening

## Practice- Based Learning and Improvement

The competency of Practice- Based Learning and Improvement includes:

- analyze practice experience and perform practice-based improvement activities using a systematic methodology
- locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems
- obtain and use information about their own population of patients and the larger population from which their patients are drawn
- apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness
- use information technology to manage information, access on-line medical information; and support their own education
- facilitate the learning of students and other health care professionals

## Practice- Based Learning and Improvement :Goals and Objectives

**Goal #1: Pediatric Competencies in Brief (ED). Demonstrate high standards of professional competence while working with patients in the Emergency Department. [For details see Pediatric Competencies.**

**Objectives:**

1. 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.
2. Use scientific methods and evidence to investigate, evaluate and improve patient care in ED
3. Identify personal learning needs, systematically organize relevant information resources for future reference, and plan for continuing acquisition of knowledge and skills.

## **Systems Based Practice**

The competency of System Based Practice includes:

- understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice
  - know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources
  - practice cost-effective health care and resource allocation that does not compromise quality of care
  - advocate for quality patient care and assist patients in dealing with system complexities
- know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance

## **Systems Based Practice :Goals and Objectives**

**Goal #1: EMS System for Children. Understand the basic principles and utilization of emergency medical services for children**

### **Objectives:**

- #1. Describe the organization and utilization of emergency medical systems for children in one's local area, including.
- #2. Demonstrate the ability to activate and use the local EMS for children, including interhospital transport.

**Goal #2: Pediatric Competencies in Brief (ED). Demonstrate high standards of professional competence while working with patients in the Emergency Department. [For details see Pediatric Competencies.**

### **Objectives:**

- #1. Understand how to practice high-quality health care and advocate for patients within the context of the health care system.
- #2. Demonstrate sensitivity to the costs of care in the ED setting and take steps to minimize costs without compromising quality
- #3. Recognize and advocate for families who need assistance to deal with system complexities. Recognize one's limits and those of the system; take steps to avoid medical errors.

## **Professionalism**

The competency of Professionalism includes:

- demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development
- demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices
- demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities

## **Professionalism :Goals and Objectives**

**Goal #1: Resuscitation and Stabilization (ED). Assess, resuscitate, and stabilize critically ill or injured children in the Emergency Department (ED) setting in a timely fashion.**

### **Objectives:**

- #1. Rapidly recognize and assess emergent patients, such as those in respiratory failure or shock.
- #2. Using resuscitation drugs appropriately

**Goal #2: Common Signs and Symptoms (ED). Evaluate and manage common signs and symptoms in infants, children, and adolescents that present to the ED and urgent care center.**

**Objectives:**

#1. Evaluate and Stabilize patients with signs and symptoms that present in the ED setting (examples below).

- Dental: pain or trauma of mouth, jaw or tooth; tooth injury or loss
- Surgery/trauma: acute abdomen, burns, lacerations, trauma.

**Goal #3: Common Conditions (ED). Recognize and stabilize common illnesses and injuries that present emergently.**

**Objectives:**

#1. Evaluate and manage patients with common diagnoses that present in the ED setting (examples below):

- 1.Dermatology: acute drug reactions,
- 2.Ophthalmologic: corneal abrasion, conjunctivitis, infection, ocular foreign body, hyphema, trauma
- 3.Orthopedic: arthritis, common dislocations, discitis, fractures, gait disturbance, Osgood Slatter's Disease, overuse syndromes, osteomyelitis, septic arthritis, sprains, strains
- 4.Otolaryngologic: epistaxis, foreign body aspiration, peritonsillar or retropharyngeal abscess
- 5.Trauma/surgical: burns, closed head injury, dental injuries, intracranial hemorrhages (subdural, epidural, subarachnoid), skull fractures, soft tissue injury (including lacerations, abrasions, and contusions), major trauma to head or face, neck or spine, chest, abdomen, urogenital tract, major vessels or organs (with surgeon/trauma team)
- 6.Toxicants/environmental injuries: electrical injury, heat and cold injury,
- 7.ingestion/poisoning (unknown substance or common poisons: acetaminophen, antidepressants, benzodiazepines, carbon monoxide, cocaine, cough and cold medicines, digitoxin, drugs of abuse, hydrocarbons, iron, narcotics, neuroleptics),
- 8.smoke inhalation,
- 9.submersion injury/near drowning,
10. Psychiatric: combative patient, conversion reaction, depression, suicide attempt/ideation, panic attacks.

**Goal #4: Diagnostic Testing (ED). Use common diagnostic tests and imaging studies appropriately in the ED setting.**

**Objectives:**

#1. Demonstrate understanding of common diagnostic tests and imaging studies used in the ED by being able to:

- #1.Explain the indications for and limitations of the study
- #2.Understand the benefits and disadvantages of family presence during procedures.
- #3.Know or be able to locate readily age-appropriate normal values for lab studies.
- #4.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 the utility of tests in various clinical settings.
- #5.Discuss cost and utilization issues.
- #6.Interpret test results in the context of the care of the specific patient.
- #7.Discuss therapeutic options for correction of abnormalities

#2. Use appropriately the following laboratory studies when indicated for patients in the ED setting:

1. CBC with differential count, platelets, RBC indices
2. Bacterial, viral, and fungal cultures and rapid screens Serologic tests for infection (e.g., monospot, VDRL, hepatitis)
3. Blood chemistries: electrolytes, calcium, magnesium, phosphate, and glucose
4. Arterial, venous, and capillary blood gases
5. Renal function tests
6. Tests of hepatic function and damage
7. Drug levels and toxic screens
8. Gram stain
9. Wet mount
10. Urinalysis
11. CSF studies
12. Stool studies
13. Coagulation studies
14. Pregnancy test (urine, blood)
15. Other fluid studies (e.g., pleural fluid, joint aspiration fluid)

**#3.** Use the following imaging or radiographic studies when indicated for patients in the ED setting:

1. Plain radiographs of chest, skull, extremity bones, abdomen, cervical spine
2. Other imaging techniques, such as CT, MRI, ultrasound, and nuclear scans (interpretation not expected)
3. Contrast or air enema for suspected intussusception or upper GI series for suspected malrotation

**#4.** Use the following screening and diagnostic studies when indicated for patients in the ED setting:

1. Electrocardiogram
2. Vision screening
3. Appropriate urgent use of echocardiography

**Goal #5: Monitoring and Therapeutic Modalities (ED). Understand how to use physiologic monitoring and special technology and treatment in the ED setting.**

**Objectives:**

**#1.** Demonstrate understanding of the monitoring techniques and special treatments commonly used in the ED by being able to:

1. Discuss indications, contraindications, and complications.
2. Demonstrate proper use of technique or treatment for children of varying ages.
3. Interpret results of monitoring based on method used, age, and clinical situation.

**#2.** Use appropriately the monitoring techniques used in the ED:

1. Physiologic monitoring of temperature, blood pressure, heart rate, respirations
2. Pulse oximetry

**#3.** Utilize appropriately the treatments and techniques used in the ED:

1. Universal precautions
2. Gastrointestinal decontamination for poisoning
3. Administration of nebulized medication
4. Injury, wound and burn care
5. Suturing and topical adhesive



6. Splinting
7. Oxygen delivery systems

**#4.** Demonstrate understanding of the following methods of anesthesia or pain management used in the ED:

1. Methods for recognizing and evaluating pain
2. Topical/local/regional anesthesia
3. ASA classification system
4. Procedural sedation
5. Rapid sequence intubation
6. Sedatives, non-narcotic and narcotic analgesics
7. Behavioral techniques and supportive care
8. Other non-pharmacologic methods of pain control (e.g., distraction techniques and humor therapy)

**Goal #6: Pediatric Competencies in Brief (ED). Demonstrate high standards of professional competence while working with patients in the Emergency Department. [For details see Pediatric Competencies.**

**Objectives:**

- #1. Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to diversity.
- #2. Demonstrate a commitment to professionalism despite the pace and stress of the ED setting.
- #3. Adhere to ethical and legal principles, and be sensitive to diversity. Identify and describe potential ethical dilemmas that one may encounter in the ED (e.g., such as resuscitation of patients with little hope of recovery; treatment of disabled patients; providing confidential care to mature minors [pregnancy termination, STDs, substance abuse]; foregoing life-sustaining treatment; identifying and referring organ donors).
- #4. Discuss key principles and identify resources for information about legal issues of importance to practice in the ED (e.g., emergency care for indigent patients; laws regarding inter-hospital patient transfer; consent-to-treat issues in the emergency treatment of minors; rights of parents to refuse treatment and legal options of providers; reporting of child abuse and neglect; death reports; and obligations of physicians in the ED to facilitate follow-up care).

## **Interpersonal and Communication Skills**

The competency of interpersonal and communication skills include:

- create and sustain a therapeutic and ethically sound relationship with patients
- use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills
- work effectively with others as a member or leader of a health care team or other professional group

## **Interpersonal and Communication Skills: Goals and Objectives**

**Goal #1: Resuscitation and Stabilization (ED). Assess, resuscitate, and stabilize critically ill or injured children in the Emergency Department (ED) setting in a timely fashion.**

**Objectives:**

- #1. Rapidly recognize and assess emergent patients, such as those in respiratory failure or shock.

#2. Using resuscitation drugs appropriately

**Goal #2: Common Signs and Symptoms (ED). Evaluate and manage common signs and symptoms in infants, children, and adolescents that present to the ED and urgent care center.**

**Objective:**

#1. Evaluate and Stabilize patients with signs and symptoms that present in the ED setting (examples below).

- Dental: pain or trauma of mouth, jaw or tooth; tooth injury or loss
- Surgery/trauma: acute abdomen, burns, lacerations, trauma.

**Goal #3: Common Conditions (ED). Recognize and stabilize common illnesses and injuries that present emergently.**

**Objectives:**

#1. Evaluate and manage patients with common diagnoses that present in the ED setting (examples below):

- 1.Dermatology: acute drug reactions,
- 2.Ophthalmologic: corneal abrasion, conjunctivitis, infection, ocular foreign body, hyphema, trauma
- 3.Orthopedic: arthritis, common dislocations, discitis, fractures, gait disturbance, Osgood Slatter's Disease, overuse syndromes, osteomyelitis, septic arthritis, sprains, strains
- 4.Otolaryngologic: epistaxis, foreign body aspiration, peritonsillar or retropharyngeal abscess
- 5.Trauma/surgical: burns, closed head injury, dental injuries, intracranial hemorrhages (subdural, epidural, subarachnoid), skull fractures, soft tissue injury (including lacerations, abrasions, and contusions), major trauma to head or face, neck or spine, chest, abdomen, urogenital tract, major vessels or organs (with surgeon/trauma team)
- 6.Toxicants/environmental injuries: electrical injury, heat and cold injury,
- 7.ingestion/poisoning (unknown substance or common poisons: acetaminophen, antidepressants, benzodiazepines, carbon monoxide, cocaine, cough and cold medicines, digitoxin, drugs of abuse, hydrocarbons, iron, narcotics, neuroleptics),
- 8.smoke inhalation,
- 9.submersion injury/near drowning,
10. Psychiatric: combative patient, conversion reaction, depression, suicide attempt/ideation, panic attacks.

**Goal #4: Diagnostic Testing (ED). Use common diagnostic tests and imaging studies appropriately in the ED setting.**

**Objectives:**

#1. Demonstrate understanding of common diagnostic tests and imaging studies used in the ED by being able to:

- #1.Explain the indications for and limitations of the study
- #2.Understand the benefits and disadvantages of family presence during procedures.
- #3.Know or be able to locate readily age-appropriate normal values for lab studies.
- #4.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 the utility of tests in various clinical settings.
- #5.Discuss cost and utilization issues.
- #6.Interpret test results in the context of the care of the specific patient.
- #7.Discuss therapeutic options for correction of abnormalities

**#2.** Use appropriately the following laboratory studies when indicated for patients in the ED setting:

1. CBC with differential count, platelets, RBC indices
2. Bacterial, viral, and fungal cultures and rapid screens Serologic tests for infection (e.g., monospot, VDRL, hepatitis)
3. Blood chemistries: electrolytes, calcium, magnesium, phosphate, and glucose
4. Arterial, venous, and capillary blood gases
5. Renal function tests
6. Tests of hepatic function and damage
7. Drug levels and toxic screens
8. Gram stain
9. Wet mount
10. Urinalysis
11. CSF studies
12. Stool studies
13. Coagulation studies
14. Pregnancy test (urine, blood)
15. Other fluid studies (e.g., pleural fluid, joint aspiration fluid)

**#3.** Use the following imaging or radiographic studies when indicated for patients in the ED setting

1. Plain radiographs of chest, skull, extremity bones, abdomen, cervical spine
2. Other imaging techniques, such as CT, MRI, ultrasound, and nuclear scans (interpretation not expected)
3. Contrast or air enema for suspected intussusception or upper GI series for suspected malrotation

**#4.** Use the following screening and diagnostic studies when indicated for patients in the ED setting:

1. Electrocardiogram
2. Vision screening
3. Appropriate urgent use of echocardiography

**Goal #5: Monitoring and Therapeutic Modalities (ED). Understand how to use physiologic monitoring and special technology and treatment in the ED setting.**

**Objectives:**

**#1.** Demonstrate understanding of the monitoring techniques and special treatments commonly used in the ED by being able to:

1. Discuss indications, contraindications, and complications.
2. Demonstrate proper use of technique or treatment for children of varying ages.
3. Interpret results of monitoring based on method used, age, and clinical situation.

**#2.** Use appropriately the monitoring techniques used in the ED:

1. Physiologic monitoring of temperature, blood pressure, heart rate, respirations
2. Pulse oximetry

**#3.** Utilize appropriately the treatments and techniques used in the ED:

1. Universal precautions
2. Gastrointestinal decontamination for poisoning

3. Administration of nebulized medication
4. Injury, wound and burn care
5. Suturing and topical adhesive
6. Splinting
7. Oxygen delivery systems

**#4. Demonstrate understanding of the following methods of anesthesia or pain management used in the ED:**

1. Methods for recognizing and evaluating pain
2. Topical/local/regional anesthesia
3. ASA classification system
4. Procedural sedation
5. Rapid sequence intubation
6. Sedatives, non-narcotic and narcotic analgesics
7. Behavioral techniques and supportive care
8. Other non-pharmacologic methods of pain control (e.g., distraction techniques and humor therapy)

**Goal #6: Pediatric Competencies in Brief (ED). Demonstrate high standards of professional competence while working with patients in the Emergency Department. [For details see Pediatric Competencies.**

**Objectives:**

- #1. Demonstrate interpersonal and communication skills that result in information exchange and partnering with patients, their families and professional associates
- #2. Provide effective patient education, including reassurance, for a condition(s) commonly seen in the ED.
- #3. Participate effectively as part of an interdisciplinary team in the ED to create and sustain information exchange, including communication with the primary care physician.
- #4. Provide case-based teaching related to clinical situations encountered in ED (for students, colleagues, other professionals and/or laypersons). Maintain accurate, timely and legally appropriate medical records in the ED and urgent care settings

<b>Subspecialty Rotation: Otolaryngology</b>	
<b>Primary Goals for this Rotation</b>	
<b>6.9 GOAL: Hearing Loss. Understand the morbidity of hearing loss, intervention strategies, and the pediatrician's and other specialists' roles in prevention, recognition and management.</b>	
6.9.1 : Understand the epidemiology and prevalence of conductive and sensorineural hearing loss in childhood and adolescence.	
6.9.2 : Recognize the broad impact of hearing impairment on child and family, including social, psychological, educational and financial consequences.	
6.9.3 : Screen for hearing loss, interpret results and counsel parents, including: <ol style="list-style-type: none"> <li>1. Family and patient health history</li> <li>2. Age-appropriate physical exam</li> <li>3. Developmental assessment (behavior, language, speech)</li> <li>4. Screening audiology and tympanometry exam</li> </ol>	
6.9.4 : Describe timing and strategies for newborn hearing screening, school and office hearing screening.	
6.9.5 : Recognize thresholds of hearing loss associated with communication difficulties in office, school and group settings.	
6.9.6 : Be familiar with common interventions for hearing-impaired children and the age at which each should be initiated (e.g., hearing aids, amplification devices, cochlear implants, speech training, sign language, lip reading, communication devices).	
6.9.7 : Refer and coordinate school, speech and psychological services for the hearing-impaired child as early as possible.	
6.9.8 : Describe the roles of audiologists and general pediatricians in the ongoing management of hearing-impaired children.	
<b>6.56 GOAL: Prevention and Counseling (Otolaryngology). Understand the pediatrician's role in preventing otolaryngologic disease and dysfunction through screening and counseling.</b>	
6.56.1 : Screen children for hearing loss. <ol style="list-style-type: none"> <li>1. Universal newborn screening and follow-up</li> <li>2. Routine hearing screening at health maintenance visits</li> </ol>	
6.56.2 : Screen for speech and language delays and disorders.	
6.56.3 : Provide strategies for preventing foreign bodies in nose,	

airway and ear.	
6.56.4 : Encourage smoking cessation in parents in order to optimize a child's respiratory health.	
6.56.5 : Counsel teenagers about dangers of smoking and chewing tobacco.	
6.56.6 : Counsel families and adolescents about reducing noise-related hearing loss.	
<b>6.57 GOAL: Normal vs. Abnormal (Otolaryngology). Differentiate normal otolaryngologic conditions from abnormal ones</b>	
6.57.1 : Recognize normal development of the ear, sinuses, nose, pharynx, and of hearing, speech and language from birth to adolescence.	
6.57.2 : Determine whether a child's otolaryngological dysfunction (e.g., hoarse voice, nasal discharge) is a temporary state caused by a minor problem or represents a potentially serious pathological process.	
6.57.3 : Demonstrate ability to perform and/or interpret the following clinical studies or procedures: <ol style="list-style-type: none"> <li>1. Cerumen removal from ear canal</li> <li>2. Simple foreign body removal from nose and ear</li> <li>3. Pneumatic otoscopy</li> <li>4. Suctioning of nares, oropharynx, tracheostomy</li> <li>5. Tracheostomy tube replacement</li> <li>6. Tracheal aspirates, including via tracheostomy (collection, culture, interpretation)</li> <li>7. Nasopharyngeal wash specimens (collection and interpretation)</li> <li>8. Nasal smears for polymorphonuclear cells (collection and interpretation)</li> <li>9. Head CT</li> <li>10. Sinus, airway radiographs</li> <li>11. Airway fluoroscopy</li> <li>12. Tympanocentesis</li> </ol>	
<b>6.58 GOAL: Undifferentiated Signs and Symptoms (Otolaryngology). Evaluate and appropriately treat or refer these presenting otolaryngological signs and symptoms.</b>	
6.58.1 : Create a strategy to determine if the following presenting signs and symptoms are caused by an otolaryngologic condition, and then treat or refer appropriately: <ol style="list-style-type: none"> <li>1. Ear pain/drainage</li> <li>2. Nasal discharge</li> <li>3. Snoring</li> </ol>	

<ol style="list-style-type: none"> <li>4. Sore throat</li> <li>5. Stridor</li> <li>6. Nasal polyps</li> <li>7. Neck mass or anomaly</li> <li>8. Hoarse voice</li> <li>9. Nosebleed</li> </ol>	
<p><b>6.59 GOAL: Common Conditions Not Referred (Otolaryngology). Diagnose and manage common otolaryngological conditions that generally do not require referral.</b></p>	
<p>6.59.1 : Diagnose and manage these conditions:</p> <ol style="list-style-type: none"> <li>1. Allergic rhinitis</li> <li>2. Blunt nasal trauma</li> <li>3. Cervical adenitis</li> <li>4. Epistaxis</li> <li>5. Otitis media and externa, uncomplicated</li> <li>6. Parotitis (mild)</li> <li>7. Pharyngitis (viral and streptococcal)</li> <li>8. Routine care for the child with a tracheostomy</li> <li>9. Simple nasal and ear canal foreign bodies</li> <li>10. Sinusitis</li> <li>11. Stridor, mild (croup, laryngomalacia)</li> <li>12. Tonsillar hypertrophy without obstruction</li> <li>13. Uvulitis</li> </ol>	
<p><b>6.60 GOAL: Conditions Generally Referred (Otolaryngology). Recognize, provide initial management and refer appropriately conditions that usually require otolaryngologic referral.</b></p>	
<p>6.60.1 : Diagnose, provide initial management of, and refer appropriately conditions such as:</p> <ol style="list-style-type: none"> <li>1. Abscess (retropharyngeal, peritonsillar)</li> <li>2. Airway obstruction (acute, chronic, tonsillar, adenoidal, nasal, and lower airway)</li> <li>3. Cholesteatoma</li> <li>4. Congenital anomalies of the pinna, nose, lip, palate, jaw, neck</li> <li>5. Complicated otitis media, sinusitis, epistaxis and parotitis</li> <li>6. Epiglottitis</li> <li>7. Facial nerve palsy</li> <li>8. Foreign body of the aerodigestive tract</li> <li>9. Head and neck masses</li> <li>10. Nasal polyp</li> <li>11. Significant hearing loss</li> <li>12. Significant trauma to the middle or external ear, nose, lip, palate, pharynx</li> <li>13. Sleep apnea</li> <li>14. Tympanic membrane perforation (traumatic or persistent)</li> </ol>	

6.60.2 : Identify the role and general scope of practice of the otolaryngologist; recognize situations where children benefit from the skills of pediatric specialists; and work effectively with these professionals in the care of children.	
<b>6.61 GOAL: Otitis Media. Diagnose and manage acute and chronic suppurative otitis media and otitis media with effusion.</b>	
6.61.1 : Demonstrate successful removal of cerumen from ear canals to achieve satisfactory visualization of the tympanic membrane (TM).	
6.61.2 : Describe an optimal means of holding the child and the optimal equipment necessary for visualization of the TM in an infant, including type of speculum, light source, type of bulb, type of examination head, and use of the bulb to observe for TM mobility.	
6.61.3 : Demonstrate correct interpretation of the tympanogram for a child with: AOM, middle ear effusion, obstruction of the ear canal, ossicular disruption, and perforation of the TM.	
6.61.4 : Differentiate between complicated and uncomplicated AOM, mild and severe AOM, and the appropriate management of each variety.	
6.61.5 : Diagnose acute otitis media, using visual and pneumatic otoscopy, tympanometry, history, and signs and symptoms (e.g., fever, ear pain).	
6.61.6 : Diagnose and treat persistent otitis media, identifying treatment options, including indications for tympanocentesis.	
6.61.7 : Use antibiotic therapy judiciously to treat acute otitis media, taking into account the typical pathogens involved, and their antibiotic sensitivities and resistance patterns. Be prepared to explain to parents the need to limit antibiotic use in cases of mild illness.	
6.61.8 : Explain the role of antibiotic prophylaxis for recurrent acute otitis media.	
6.61.9 : Follow-up children with acute otitis media at appropriate intervals, monitoring for the development of chronic or recurrent acute otitis media or persistent otitis media with effusion.	
6.61.10 : Monitor infants and children with chronic middle ear effusion, recurrent acute otitis media or chronic otitis media for hearing loss and language delay; recognize indications for referral for formal audiologic and speech evaluation.	
6.61.11 : Describe the generally accepted criteria for insertion of pressure equalizing tubes (PET) in children, with specific reference	



to published guidelines.	
6.61.12 : Recognize clinical cases warranting referral to an otolaryngologist for evaluation of need for pressure equalizing tubes (PET) for middle ear ventilation. Refer appropriately, providing medical information about medical course under your care and special circumstances that may affect the decision.	
6.61.13 : Counsel families regarding the risks and benefits of pressure equalizing tubes (PET).	
6.61.14 : Describe the means of preventing acute otitis media for which there is evidence in the literature.	
<b>6.62 GOAL: Sinusitis. Diagnose and manage patients with sinusitis, and refer when appropriate.</b>	
6.62.1 : Diagnose acute sinusitis accurately, using information from the history and physical examination.	
6.62.2 : Explain the role of radiologic tests in diagnosing sinusitis, including cost factors and limitations of each study (radiographs and computed tomography).	
6.62.3 : Manage cases of sinusitis, judiciously using the appropriate antibiotics, with an awareness of sensitivity and resistance patterns of common bacterial pathogens.	
6.62.4 : Prescribe adjunctive pharmacotherapy for sinusitis as needed (e.g., nasal drops or sprays, antihistamines).	
6.62.5 : Explain to parents the pathophysiology, epidemiology and management of sinusitis, especially viral rhinosinusitis.	
6.62.6 : Monitor patients and recognize complications of sinusitis (e.g., Pott's puffy tumor, meningitis, chronic or recurrent sinusitis).	
6.62.7 : Refer sinusitis patients when appropriate (e.g., with chronic/recurrent disease), explaining rationale for referral and possible therapeutic interventions (e.g., endoscopic surgery).	
6.62.8 : Describe characteristics that help differentiate allergic, viral and bacterial sinusitis; as well as acute and chronic sinusitis.	
6.62.9 : Explain conditions that mimic sinusitis and how to sort through the differential diagnosis.	
<b>6.63 GOAL: Tonsillar and Adenoidal Hypertrophy. Screen, diagnose and manage patients with symptoms secondary to tonsillar and adenoidal hypertrophy, and refer when appropriate.</b>	
6.63.1 : Screen for tonsillar and adenoidal hypertrophy at health maintenance visits, using information from the physical examination and history.	

6.63.2 : Counsel parents about the pathophysiology of conditions associated with tonsillar and adenoidal hypertrophy and the possibility of normal developmental regression in some cases.	
6.63.3 : Explain to parents the reasons for referral to otolaryngology and general issues related to surgical intervention.	
6.63.4 : Describe the use of diagnostic tests for assessing tonsils and adenoids (e.g., airway films, sleep studies).	
<b>6.95 GOAL: Pediatric Competencies in Brief (Subspecialty Rotation). Demonstrate high standards of professional competence while working with patients under the care of a subspecialist. [For details see Pediatric Competencies.]</b>	
6.95.1 : 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.	
6.95.1.1 :Use a logical and appropriate clinical approach to the care of patients presenting for specialty care, applying principles of evidence-based decision-making and problem-solving.	
6.95.1.2 :Describe general indications for subspecialty procedures and interpret results for families.	
6.95.2 : 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.	
6.95.2.1 :Acquire, interpret and apply the knowledge appropriate for the generalist regarding the core content of this subspecialty area.	
6.95.2.2 :Critically evaluate current medical information and scientific evidence related to this subspecialty area and modify your knowledge base accordingly.	
6.95.3 : 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.	
6.95.3.1 :Provide effective patient education, including reassurance, for a condition(s) common to this subspecialty area.	
6.95.3.2 :Communicate effectively with primary care and other physicians, other health professionals, and health-related agencies to create and sustain information exchange and teamwork for patient care.	

6.95.3.3 :Maintain accurate, legible, timely and legally appropriate medical records, including referral forms and letters, for subspecialty patients in the outpatient and inpatient setting.	
6.95.4 : 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.	
6.95.4.1 :Identify standardized guidelines for diagnosis and treatment of conditions common to this subspecialty area and adapt them to the individual needs of specific patients.	
6.95.4.2 :Identify personal learning needs related to this subspecialty; systematically organize relevant information resources for future reference; and plan for continuing acquisition of knowledge and skills.	
6.95.5 : Competency 5: Professionalism. Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to diversity.	
6.95.5.1 :Demonstrate personal accountability to the well-being of patients (e.g., following up on lab results, writing comprehensive notes, and seeking answers to patient care questions).	
6.95.5.2 :Demonstrate a commitment to carrying out professional responsibilities.	
6.95.5.3 :Adhere to ethical and legal principles, and be sensitive to diversity.	
6.95.6 : 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.	
6.95.6.1 :Identify key aspects of health care systems as they apply to specialty care, including the referral process, and differentiate between consultation and referral.	
6.95.6.2 :Demonstrate sensitivity to the costs of clinical care in this subspecialty setting, and take steps to minimize costs without compromising quality	
6.95.6.3 :Recognize and advocate for families who need assistance to deal with systems complexities, such as the referral process, lack of insurance, multiple medication refills, multiple appointments with long transport times, or inconvenient hours of service.	
6.95.6.4 :Recognize one's limits and those of the system; take steps to avoid medical errors.	

<b>Procedures</b>	
<b>7.1.GOAL: Technical and therapeutic procedures.</b> Describe the following procedures, including how they work and when they should be used; competently perform those commonly used by the pediatrician in practice.	
Foreign body removal (simple): nose	
Foreign body removal (simple): ear	
Suctioning: tracheostomy	
Tracheostomy tube: replacement	
<b>7.2. GOAL: Diagnostic and screening procedures.</b> 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.	
Audiometry evaluation: interpretation	
Radiologic interpretation: CT of head	
Radiologic interpretation: lateral neck X-ray	
Radiologic interpretation: sinus films	
<b>Source</b>	
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: <a href="http://www.ambpeds.org/egweb">www.ambpeds.org/egweb</a> . [Accessed 05/17/2012]. Project to develop this website was funded by the Josiah Macy, Jr. Foundation 2002-2005.	

## PRIMARY GOALS AND OBJECTIVES FOR INPATIENT PEDIATRIC ROTATION

**Goal #1: Identify common signs and symptoms (Inpatient), evaluate and manage common acute childhood illness presenting to the in-patient unit.**

1. General: Acute febrile illness, Fever of Unknown origin, Failure to thrive, Hypothermia, Weight Loss.
2. Allergy/Immunology: acute drug allergies/reactions, anaphylaxis, immunodeficiencies, including GVHD, recurrent pneumonia, serum sickness, severe angioedema.
3. Cardiovascular: Kawasaki Disease, Myocarditis, Congenital Heart Disease, Congestive Heart failure, Chest pain, Syncope, Arrhythmias.
4. Endocrine: Diabetes (including diabetic ketoacidosis), Hypoglycemia, Hypo/hyperthyroidism acute managements and complications, Congenital Adrenal Hyperplasia, Acute Adrenal insufficiency.
5. GI/Nutrition: Acute Gastroenteritis, Gastro esophageal Reflux w and w/o Disease, Appendicitis w and w/o associated complication, Acute Pancreatitis, Acute Hepatitis, Inflammatory Bowel Disease – acute and chronic complications, Chronic Liver disease, TPN management, Upper and Lower bleeding, Cholangitis, Intestinal obstruction.
6. GU/Renal: UTI, Acute Pyelonephritis, Hematuria, Acute Glomerulonephritis, HSP, Nephrotic Syndrome, Nephritic Syndrome, electrolyte and acid-base disturbances, Electrolyte Disturbances.
7. Gynecologic: Genital trauma, Pelvic inflammatory disease, sexual assault
8. Hematologic/Oncologic: Anemia, Thrombocytopenia, Leukemia, Neutropenia, Febrile Neutropenia, common malignancies, tumor lysis syndrome
9. Infectious Disease: Cellulitis (including periorbital and orbital), Cervical adenitis, Dental abscess with complications, Septic Arthritis, Infections in immunocompromised hosts, Laryngotracheobronchitis, Late presentation of congenital infections (CMV, syphilis, tuberculosis, abscesses), Central Line infection, meningitis (bacterial or viral), osteomyelitis, pneumonia (viral or bacterial), sepsis/bacteremia (including newborns), septic arthritis, tuberculosis
10. Pharmacology/Toxicology: common drug poisoning or overdose, dose adjustment for special conditions or serum drug levels
11. Neurology: Febrile seizures, Meningitis, Altered mental status, Traumatic Brain Injury and complications, Acute neurologic conditions (acute cerebellar ataxia, Guillain Barre syndrome, movement disorders), Developmental delay with acute medical conditions, Seizures, VP shunt obstruction/Infection.
12. Respiratory: Bronchitis, Acute Asthma exacerbation, Croup, Stridor, Bacterial tracheitis, Epiglottitis, Cystic Fibrosis.
13. Rheumatologic: Arthritis, Arthralgias, Juvenile rheumatoid arthritis (JRA), systemic lupus erythematosus (SLE), Dermatomyositis.
14. Surgery: pre- and post-op consultation and evaluation of surgical patients (general, ENT, orthopedics, urology, neurosurgical, etc.), special needs of technology-dependent children (blocked trachea, gastric tube dysfunction)
15. Musculoskeletal: Bone and soft tissue trauma, MVA, Limp,

16. Psychiatric/Psychosocial: Acute psychosis, Child abuse or neglect, conversion symptoms, depression, Deliberate Self harm.

**GOAL #2 : Diagnostic and Screening Procedures (Inpatient). Utilize common diagnostic tests and imaging studies appropriately in the inpatient setting.**

**Demonstrate an understanding of the common diagnostic tests and imaging studies used in the inpatient 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 (lab studies).
3. Apply knowledge of diagnostic test properties, including the use of sensitivity, specificity, positive predictive value, negative predictive value, false-positive and negative results, likelihood ratios, and receiver operating characteristic curves, to assess the utility of tests in various clinical settings.
4. Recognize cost and utilization issues.
5. Interpret test results in the context of the specific patient.
6. Discuss therapeutic options for correction of abnormalities.

**Goal #2.1 : Use common laboratory studies when indicated for patients in the inpatient setting.**

1. CBC with differential, platelet count, RBC indices
2. Blood chemistries: electrolytes, glucose, calcium, magnesium, phosphate
3. Renal function tests
4. Tests of hepatic function (PT, albumin) and damage (liver enzymes, bilirubin)
5. Serologic tests for infection (e.g., hepatitis, HIV)
6. C-reactive protein, erythrocyte sedimentation rate
7. Therapeutic drug concentrations
8. Coagulation studies
9. Arterial, capillary, and venous blood gases
10. Blood Culture
11. Urinalysis/Urine Analysis
12. Cerebrospinal fluid analysis, Culture.
13. Nasopharyngeal wash
14. Stool studies
15. Other fluid studies (e.g. pleural fluid, joint fluid)
16. Electrocardiogram

**Goal 2.2 Use common imaging or radiographic studies when indicated for patients on the inpatient unit.**

1. Conventional radiographs (preliminary interpretation expected).
2. Other imaging modalities - such as CT, MRI, angiography, ultrasound, nuclear scans, contrast studies (preliminary interpretation expected).

**GOAL #3 : Monitoring and Therapeutic Modalities (Inpatient). Understand how to use physiologic monitoring and special technology in the general inpatient setting, including issues specific to care of the chronically ill child**

**Demonstrate understanding of the monitoring techniques and special treatments commonly used in the inpatient setting, by being able to:**

1. Discuss indications, contraindications and complications.
2. Demonstrate proper use of technique for children of varying ages.
3. Determine which patients need continuous monitoring or special monitoring (e.g., neurological checks).
4. Interpret and respond appropriately to results of monitoring based on method used, age and clinical situation.

**Goal # 3.1 Use appropriate monitoring techniques in the inpatient setting.**

1. Monitoring of Vital Signs
2. Cardiac monitoring
3. Pulse oximetry

**Goal #3.2 Use appropriately the treatments and techniques used in the inpatient setting.**

1. Universal precautions
2. Nasogastric tube placement
3. Administration of nebulized medication
4. Injury, wound and burn care
5. Oxygen delivery systems
6. I.V. fluids
7. I.V. pharmacotherapy (antibiotics, antiepileptics, etc.)
8. Transfusion therapy

**Goal #3.3 Describe key issues in the inpatient and home management of the technology-dependent child with the following care needs:**

1. Tracheostomy Care
2. Chronic parenteral nutrition (Hyper Alimentation)
3. Gastrostomy tube care
4. Permanent central venous catheter care

**Goal # 4. Demonstrate the skills for assessing and managing pain.**

1. Use age-appropriate pain scales in assessment.
2. Describe indications for use and side effects of common narcotic and non-narcotic analgesics.
3. Administer medications to control pain in appropriate dose, frequency and route.
4. Describe indications for and use of behavioral techniques and supportive care, and other non-pharmacologic methods of pain control

**GOAL #5 : 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.**

1. Anesthesia/analgesia: pain management
2. Bladder Catheterization
3. Central line: use/care
4. Chest physiotherapy
5. Gastric tube placement (OG/NG)
6. Gastrostomy site care when gastrostomy tube is dislodged
7. Intravenous line placement
8. Lumbar puncture
9. Medication delivery: IM/SC/ID
10. Medication delivery: inhaled
11. Medication delivery: IV
12. Medication delivery: rectal
13. PPD: placement
14. Pulmonary function tests: peak flow meter
15. Pulmonary function tests: spirometry
16. Pulse oximeter: placement
17. Rectal swab
18. Sterile technique
19. Suctioning: nares
20. Suctioning: oral pharynx
21. Suctioning: tracheostomy
22. Venipuncture

**Goal #6 : 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.**

1. ECG: emergency interpretation
2. PPD: interpretation
3. Monitoring interpretation: cardiac
4. Monitoring interpretation: pulse oximetry
5. Pulmonary function tests: interpretation
6. Preliminary Interpretation of radiographs
7. Preliminary Interpretation of Sonogram, CT – scan and Barium Studies
8. Preliminary interpretation: voiding cystourethrogram

**GOAL#7: Identification & initial stabilization of sick children**

1. Advanced Pediatric Life support
2. Participation in mock codes



## Educational Objectives

<u>Medical Knowledge</u>	<u>Patient Care</u>	<u>Interpersonal &amp; Communication Skills</u>
<ul style="list-style-type: none"> <li>• Approached clinical situations with investigatory and analytic thinking</li> <li>• Formulates sound diagnostic hypothesis</li> <li>• Shows evidence of independent study</li> <li>• Be able to order appropriate laboratory studies and consults</li> <li>• Demonstrates understanding of evaluation, management, diagnosis of common pediatric illness listed in the goals</li> <li>• Performs case discussion with medical students, co-residents, attending, consultants</li> <li>• Presentation of morning report</li> </ul> <p><b>The PL-1 resident will be able to:</b></p> <p>Demonstrate an understanding of the evaluation, management, and diagnosis of common pediatric illnesses (see Goals &amp; Objective – General Pediatrics) as evidenced by:</p> <ul style="list-style-type: none"> <li>• Daily progress notes</li> <li>• Discussions on Attending Rounds</li> <li>• Performance on oral evaluations</li> </ul> <p><b>The Supervisory resident will be able to:</b></p> <p>Demonstrate knowledge of medical problem solving and an ability to generate a differential diagnosis as evidenced by writing a brief synopsis of patients illness, of current diagnosis and plan of care after</p> <ul style="list-style-type: none"> <li>• Discussion on Attending Rounds</li> <li>• Presentation patients in Morning Report</li> <li>• Case discussion in oral evaluation</li> </ul>	<ul style="list-style-type: none"> <li>• Gathers essential and accurate information about their patients and demonstrates skilled focused clinical exam</li> <li>• Successfully integrates knowledge and assessment</li> <li>• Makes informed decisions about diagnostic and therapeutic interventions based on patient information, scientific evidence, clinical judgment</li> <li>• Develops and carry out patient management plans</li> <li>• Demonstrates appropriate procedural skills.</li> <li>• Demonstrates skills in patient education, counseling, preventive services</li> <li>• Uses information technology tools to enhance patient care</li> </ul> <p><b>The PL-1 resident will be able to:</b></p> <p>Complete all the components of an inpatient admission including:</p> <ul style="list-style-type: none"> <li>• With specific emphasis on behavioral psychosocial issues</li> <li>• Arriving at an appropriate diagnosis and outlining a management plan</li> </ul> <p><b>The Supervisory resident will be able to:</b></p> <p>Assume a leadership role with the inpatient team by:</p> <ul style="list-style-type: none"> <li>• Assigning patients to Junior residents</li> <li>• Providing direct supervision for procedures</li> <li>• Making management decisions with the ward attending whenever a patient is admitted or there is a change in the patients clinical condition</li> </ul>	<ul style="list-style-type: none"> <li>• Establishes rapport with patient and care taker</li> <li>• Demonstrates patient centered interviewing techniques</li> <li>• Demonstrate sensitivity and responsiveness to patient culture, age, gender and disabilities</li> <li>• Maintains accurate and thorough information in patient chart</li> <li>• Communicates effectively with other health care team members</li> <li>• Works effectively with the other members of health care team</li> </ul> <p><b>The PL-1 resident will be able to:</b></p> <p>Establish a therapeutic relationship with the patient and parent by:</p> <ul style="list-style-type: none"> <li>• Identifying himself as the contact person for the inpatient team</li> <li>• Discussing the day's plan of care with the patient each day</li> <li>• Explaining discharge plans and arrange appropriate follow-up</li> </ul> <p>Complete all the components of an inpatient admission including:</p> <ul style="list-style-type: none"> <li>• Writing Admission</li> <li>• Presenting the History and Physical Examination on Attending Rounds</li> </ul> <p><b>The Supervisory resident will be able to:</b></p> <p>Assume a leadership role with the inpatient team by:</p> <ul style="list-style-type: none"> <li>• Communicating with the interdisciplinary team (nursing staff, social worker, nutritionist, pharmacist, respiratory therapist)</li> </ul>

<u>Professionalism</u>	<u>Practice based learning and Improvement</u>	<u>Systems-Based Practice</u>
<p><b>The PL-1 resident will be able to:</b></p> <p>Demonstrates respect, compassion, integrity and honesty</p> <ul style="list-style-type: none"> <li>• Defines and demonstrates appropriate boundaries</li> <li>• Regular and punctual in attendance, notifies timely of any unexpected absence to the other team members</li> <li>• Demonstrates interest and initiative</li> <li>• Demonstrates professional and ethical responsibility and comply with HIPPA standards</li> </ul> <p><b>The Supervisory resident will be able to:</b></p> <ul style="list-style-type: none"> <li>• Develop insight in to emotional needs to patients and families and into the impact of illness and hospitalization on the family</li> <li>• Maintains an awareness that physicians, personal problems can adversely affect professional relationships and take necessary steps to alleviate such problems.</li> <li>• Maintains familiarity with laws, regulations and ethical issues that affect the practice of medicine and the conduct of physician</li> </ul>	<ul style="list-style-type: none"> <li>• Analyze practice experience and perform practice –based improvement activities using a systemic methodology</li> <li>• Locate, appraise, assimilate evidence from scientific studies related to their patients health problems</li> <li>• Apply knowledge of study designs and statistical methods to appraisal of clinical studies</li> <li>• Demonstrate self directed learning skills, accept and incorporate the feedback</li> <li>• Manage time effectively and facilitate learning of other students</li> </ul> <p><b>The PL-1 resident will be able to:</b></p> <ul style="list-style-type: none"> <li>• Locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems</li> <li>• Use information technology to manage information, access on-line medical information; and support their own education</li> </ul> <p><b>The Supervisory resident will be able to:</b></p> <p>Assume a leadership role with the inpatient team by:</p> <ul style="list-style-type: none"> <li>• Teaching clinical skills to PL1 residents and medical students</li> <li>• Leading the work and sign out rounds</li> </ul>	<ul style="list-style-type: none"> <li>• Aware of how types of medical practice and delivery systems differs from one another</li> <li>• Aware of system and community resources</li> <li>• Advocate for quality/cost effective patient care</li> <li>• Partner with allied health professionals, case managers, social workers to improve health care and how these activities affect system performance</li> </ul> <p><b>The PL-1 resident will be able to:</b></p> <ul style="list-style-type: none"> <li>• Identify different types of medical delivery systems</li> <li>• Develop an awareness of the costs of medical procedures and tests and to know some.</li> <li>• Arrange for appropriate discharge follow-up by contacting the primary care physician whether in house or local physician practice</li> </ul> <p><b>The Supervisory resident will be able to:</b></p> <p>Assume a leadership role with the inpatient team by:</p> <ul style="list-style-type: none"> <li>• Interfacing with subspecialty consultants and other services (e.g. surgery, psychiatry)</li> <li>• Knowing the principles of effective communication with consultants</li> <li>• Documenting discussions with the consulting colleagues and attending staff</li> </ul>

<b>Standard Rotation: Newborn Nursery</b>	
<b>Primary Goals for this Rotation</b>	
<b>3.16 GOAL: Delivery Room. Assess and manage a newborn in the delivery room, including resuscitation and stabilization of a critically ill neonate.</b>	
3.16.1 : Explain risk factors at delivery that warrant having a pediatrician in attendance.	
3.16.2 : Describe the necessary medical equipment for neonatal resuscitation, and demonstrate its proper use.	
<p>3.16.3 : Accurately assess and manage normal and high-risk newborns immediately following delivery, including:</p> <ol style="list-style-type: none"> <li>1. Assess the need for immediate resuscitation.</li> <li>2. Assign the 1-minute, 5-minute and subsequent Apgar scores.</li> <li>3. Use appropriate technique for suctioning the nose and mouth.</li> <li>4. Demonstrate at least two steps to reduce radiant heat loss.</li> <li>5. Demonstrate bag and mask ventilation.</li> <li>6. Demonstrate intubation and ventilation.</li> <li>7. Perform cardiac compression.</li> <li>8. Place an umbilical venous catheter.</li> <li>9. Demonstrate appropriate use of medications during neonatal resuscitation.</li> <li>10. Interpret scalp and cord blood gases.</li> <li>11. Rapidly inspect for signs of major malformations.</li> </ol>	
3.16.4 : Pass a course in neonatal life support (e.g., AAP/AHA Neonatal Resuscitation Program).	
3.16.5 : Demonstrate the immediate management of infants born to mothers with abnormal prenatal screening tests (antibody screening; rubella screening; HIV, HSV, syphilis, gonorrhea, hepatitis B, Group B Strep, tuberculosis and chlamydia testing).	
3.16.6 : Describe the rationale and use of eye prophylaxis, vitamin K1 administration, and hepatitis B vaccine and HBIG.	
3.16.7 : Discuss immediate breastfeeding and early bonding	

between baby and family and describe how hospital routines can facilitate or impede these natural processes.	
3.16.8 : Describe how obstetricians and pediatricians can communicate and work together as a team to improve outcome at high-risk deliveries.	
3.16.9 : Discuss prevalence and infant health issues of home deliveries by nurse midwives in one's own community.	
3.16.10 : Recognize the risks and liabilities of home birth, as well as ways the nurse midwife and pediatrician can work together to benefit the infant born at home.	
<p>3.16.11 : For these common conditions, demonstrate delivery room assessment and management; and manage newborns independently; and list criteria for consultation or transfer to level II or III nursery:</p> <ol style="list-style-type: none"> <li>1. Meconium stained fluid</li> <li>2. Respiratory depression and other common effects of maternal anesthesia, medications, or substance use/abuse</li> <li>3. Complicated labor (e.g., decelerations, maternal hypertension)</li> <li>4. Complicated delivery (e.g., problems with Cesarean Section, instrument-assisted deliveries, breech presentation, cord prolapse, placenta abruption, oligo- or polyhydramnios, precipitous deliveries)</li> <li>5. Cyanosis, respiratory distress or heart murmur</li> <li>6. Cardiorespiratory depression or abnormal blood gases</li> </ol>	
3.16.12 : Describe the care and treatment of an infant following delivery that occurred unexpectedly at home or in transit to hospital.	
<b>3.17 GOAL: Comprehensive Care in Level I Nursery. Provide comprehensive care in a level I nursery.</b>	
3.17.1 : Explain the role of the primary care pediatrician in the level I nursery and how it relates to the continuum of office health supervision care.	
3.17.2 : Effectively communicate with the mother's obstetrician during the hospital stay and her primary care provider prior to the infant's discharge.	
3.17.3 : Describe normal physiologic changes in neonatal	

<p>transition, signs of abnormal responses and strategies for their management.</p>	
<p>3.17.4 : Describe the rationale behind various nursery and delivery routines and how these affect the health and well-being of families and newborns (e.g., rooming in, on-demand feeding, 24 hour discharge of the newborn, glucose water feeds).</p>	
<p>3.17.5 : Function as a pediatric consultant to health professionals in the newborn nursery, obstetrical ward, and delivery room for routine, normal pregnancies, deliveries and newborn care.</p>	
<p>3.17.6 : Identify the role and scope of practice of general pediatricians, neonatologists, perinatologists, obstetricians, family physicians, nurse midwives, lactation consultants, primary care nurses for OB/Newborn, and social workers in relation to the normal nursery; and work collaboratively with these professionals in the care of newborns.</p>	
<p><b>3.18 GOAL: Assessment, Screening and Prevention (Normal Newborns). Assess newborns, using history, physical exam and routine screening procedures, and provide preventive counseling and intervention as indicated.</b></p>	
<p>3.18.1 : Obtain and interpret information relevant to newborn health including:</p> <ol style="list-style-type: none"> <li>1. Maternal medical, prenatal and obstetric history</li> <li>2. Family history</li> <li>3. Results of maternal screening tests (e.g, Rh), rubella, hepatitis B and C, serology for syphilis, HIV, tuberculosis, illicit drugs, blood type, group B streptococcus, herpes simplex virus, gonorrhea, and chlamydia</li> <li>4. Maternal medication use or substance use/abuse</li> <li>5. Results of prenatal ultrasound testing</li> </ol>	
<p>3.18.2 : Obtain and interpret a social history to assess the physical and psychosocial environment in the infant's home.</p>	
<p>3.18.3 : Understand and demonstrate appropriate timing for newborn exams and define the key reasons for doing the exams (e.g., determine state of transition, assess risks, identify abnormalities, and demonstrate normal findings and behaviors to parents).</p>	

<p>3.18.4 : Perform a neonatal physical examination and identify normal and abnormal findings related to:</p> <ol style="list-style-type: none"> <li>1. Gestational age assessment and growth category (AGA, SGA, LGA)</li> <li>2. Vital signs and measurements</li> <li>3. General appearance and identification of anomalies</li> <li>4. HEENT (red reflex, intact palate, short frenulum, caput, cephalohematoma)</li> <li>5. Neck and clavicles</li> <li>6. Neurologic system (symmetry, tone, reflexes, suck, behavioral state, head size and shape, spine)</li> <li>7. Respiratory effort</li> <li>8. Skin</li> <li>9. Chest and breasts</li> <li>10. Heart</li> <li>11. Lungs</li> <li>12. Abdomen (including umbilical cord)</li> <li>13. Genitalia</li> <li>14. Femoral and brachial pulses</li> <li>15. Hips (Ortolani and Barlow maneuvers)</li> <li>16. Extremities</li> </ol>	
<p>3.18.5 : Describe current standards for newborn screening, including:</p> <ol style="list-style-type: none"> <li>1. National (AAP) recommendations for universal newborn hearing screening</li> <li>2. State neonatal blood-screening program, including diseases screened for, timing, testing procedures and process for notification of abnormal results</li> <li>3. Current recommendations for maternal Group B Streptococcus screening and the evaluation of exposed neonates</li> <li>4. Appropriate use of other screening tests or protocols and their indications (e.g., blood type and Coombs, glucose, hematocrit)</li> <li>5. Appropriate use of testing to identify prenatal exposure to substances of abuse</li> </ol>	
<p>3.18.6 : Communicate effectively with parents and family in a professional and caring manner that honors family values and enhances their parenting skills and confidence.</p>	
<p>3.18.7 : Provide anticipatory guidance and prevention</p>	

<p>counseling throughout hospital stay and at time of discharge, according to recommended guidelines (e.g., AAP, Bright Futures).</p>	
<p><b>3.19 GOAL: Common Signs and Symptoms (Normal Newborns). Evaluate and appropriately treat or refer newborns with these commonly presenting signs and symptoms.</b></p>	
<p>3.19.1 : Recognize, describe clinical significance of, and develop a strategy to evaluate, manage and/or refer newborns with these common newborn signs and symptoms:</p> <ol style="list-style-type: none"> <li>1. Large birth marks (mongolian spots, hemangiomas, port wine spots)</li> <li>2. Rashes and markings secondary to birth trauma</li> <li>3. Papular and pustular rashes (erythema toxicum, pustular melanosis, staph. Pustulosis, milia)</li> <li>4. Peripheral and central cyanosis</li> <li>5. High or low temperature</li> <li>6. Tachypnea</li> <li>7. Heart murmur-asymptomatic and symptomatic</li> <li>8. Abdominal distension and masses</li> <li>9. Two vessel umbilical cords</li> <li>10. Abnormal findings on the Barlow or Ortolani</li> <li>11. Swollen breasts</li> <li>12. Vaginal bleeding</li> <li>13. Subconjunctival hemorrhages</li> <li>14. Corneal opacities or absent red reflex</li> <li>15. Facial palsy</li> <li>16. Fractured clavicle</li> <li>17. Brachial plexus injury</li> <li>18. Cephalohematoma or caput</li> <li>19. Ear tags, pits</li> <li>20. Palate abnormalities (cleft, submucous cleft)</li> <li>21. Polydactyly</li> <li>22. Syndactyly</li> <li>23. Plethora</li> <li>24. Pallor</li> <li>25. Respiratory distress</li> <li>26. Abnominal mass</li> <li>27. Genitourinary abnormalities (ambiguous genitalia, hypospadias, undescended testicle)</li> <li>28. Microcephaly</li> <li>29. Macrocephaly</li> <li>30. Sacral dimple, pit, hair tuft</li> </ol>	
<p><b>3.20 GOAL: Common Conditions (Normal Newborns). Evaluate and</b></p>	

<p><b>appropriately treat or refer newborns with these commonly presenting conditions.</b></p>	
<p>3.20.1 : Recognize, describe clinical significance of, and develop a strategy to evaluate, manage and/or refer newborns with the following common newborn clinical situations:</p> <ol style="list-style-type: none"> <li>1. Large and/or small for gestational age babies</li> <li>2. Infant of a diabetic mother</li> <li>3. Infant of substance abusing mother</li> <li>4. Child with ABO/Rh incompatibility</li> <li>5. Polycythemia</li> <li>6. Premature/postmature infant</li> <li>7. Jitteriness</li> <li>8. Transient metabolic disturbances (hypoglycemia, etc.)</li> <li>9. Delayed urination</li> <li>10. Delayed stooling</li> <li>11. Vomiting feeds/bilious emesis</li> <li>12. Poor/delayed suck</li> <li>13. Respiratory distress with feedings</li> <li>14. Jaundice</li> <li>15. Infant with risk factor for DDH (girl breech, +family hx)</li> <li>16. Infant with abnormalities on prenatal ultrasound (pyelectasia, hydronephrosis, choroids plexus cyst)</li> <li>17. Dysmorphic infant or infant with known chromosomal abnormality (e.g., Trisomy 21)</li> <li>18. Multiple births (near and at term)</li> <li>19. Eye discharge</li> <li>20. Abnormal newborn hearing screen results</li> <li>21. Infant born to a mother with a significant medical condition (lupus, seizure disorder, obstetrical condition such as HELLP syndrome)</li> </ol>	
<p>3.20.2 : Use and/or interpret clinical tests commonly used in Newborn Nursery setting, such as:</p> <ol style="list-style-type: none"> <li>1. Physiologic monitoring (HR, RR, pulse oximetry, blood gas, doppler BP measurement)</li> <li>2. Dubowitz exam for gestational age assessment, premature and term infant growth curves</li> <li>3. CBC, ABO typing and Coombs testing, blood glucose/glucometer, bilirubin (serum and transcutaneous), maternal cord blood antibodies</li> <li>4. Xray of chest, abdomen</li> </ol>	



5. Ultra sound of kidneys/bladder, head, hips, lower spine	
3.20.3 : Be familiar with common assessment tools and studies used by obstetricians to assess normal pregnancies and infant well-being close to term and during the labor and delivery process.	
3.20.4 : Discuss common post-delivery obstetrical issues that mothers face, and how these affect their recovery and ability to care for their newborn:  <ol style="list-style-type: none"> <li>1. C-section delivery</li> <li>2. Tubal ligation</li> <li>3. Retention of placenta</li> <li>4. Post-partum hemorrhage</li> <li>5. Post-partum depression</li> <li>6. Post-partum infections</li> <li>7. Hypertension</li> </ol>	
3.20.5 : Discuss care and communication issues for an infant being placed for adoption (including both birth and adoptive parents).	
<b>3.21 GOAL: Nutrition (Normal Newborns). Manage breast- and bottle-feeding in the newborn period.</b>	
3.21.1 : Assess a newborn's nutritional status based on maternal medical and obstetrical history and infant's history (e.g., illness, feeding, stools, urination) and physical exam (e.g., weight expected for gestational age, subcutaneous fat, hydration, neurologic or oral/facial anomalies) and implement appropriate feeding plans.	
3.21.2 : Counsel parents about feeding choices and assess for potential risks/difficulties.	
3.21.3 : Encourage and support mothers who are breastfeeding.	
3.21.4 : Counsel and support mothers who are formula feeding.	
3.21.5 : Refer mothers to WIC and other resources for assistance with food purchase, nutrition education, and breastfeeding support equipment.	
3.21.6 : Recognize and manage these conditions:	

<ol style="list-style-type: none"> <li>1. Common problems for breastfeeding infants and mothers</li> <li>2. Maternal use of medications that are transmitted via breast milk</li> <li>3. Maternal infections and risk of transmission (Hepatitis B, Hepatitis C, HIV)</li> <li>4. Preserving breastfeeding while managing jaundice</li> <li>5. Newborn who is a poor feeder</li> <li>6. Feeding plans for the SGA or premature infant</li> <li>7. Feeding plans for the infant of a diabetic mother</li> <li>8. Feeding plans for the infant with a cleft palate</li> <li>9. Feeding plans for neurologically depressed/abnormal newborn</li> </ol>	
<b>3.22 GOAL: Infections (Normal Newborns). Assess and manage common infections in the normal newborn nursery.</b>	
<p>3.22.1 : Identify common and important perinatal infections.</p>	
<p>3.22.2 : Discuss methods for screening and, where appropriate, preventive treatment of mother and infant (chlamydia, CMV, gonorrhea, group B strep, hepatitis B, hepatitis C, HSV, HIV, tuberculosis, HPV, parvovirus, rubella, syphilis, toxoplasmosis, and varicella).</p>	
<p>3.22.3 : Identify newborns at risk for bacterial sepsis by history, physical exam, and laboratory studies.</p>	
<p>3.22.4 : Practice the AAP/ACOG accepted policies for infection reduction in the newborn nursery.</p>	
<p>3.22.5 : Describe why umbilical cord care is routinely performed and what methods are available.</p>	
<p>3.22.6 : Counsel parents about recommendations on routine Hepatitis B vaccination, including risks, benefits, alternatives, and common side effects.</p>	
<p>3.22.7 : Recognize and manage:</p> <ol style="list-style-type: none"> <li>1. Newborn with signs of sepsis (e.g., fever, poor feeding, tachypnea, low temperature)</li> <li>2. Infant born to mother with fever</li> <li>3. Infant born to mother with a history of a perinatal infectious disease (e.g., group B strep, chlamydia, syphilis, HSV)</li> <li>4. Infant born to mother with prolonged rupture of</li> </ol>	

<p>membranes</p> <p>5. Infant born to mother who received antibiotic during delivery</p>	
<p><b>3.23 GOAL: Jaundice. Recognize and manage jaundice in the newborn period.</b></p>	
<p>3.23.1 : Interpret maternal history for factors contributing to jaundice (Rh, blood type, gestational age, infection, family history of jaundice in infants, etc.).</p>	
<p>3.23.2 : Interpret infant's history for possible etiologies of jaundice (e.g., infrequent or ineffective feeding, poor urine or stool output, acholic stool, blood type, risk factors for infection, metabolic disease).</p>	
<p>3.23.3 : Perform a physical exam to assess for jaundice or other evidence of hepatic dysfunction (e.g., skin color, sclerae, bruising, cephalhematoma, organomegaly).</p>	
<p>3.23.4 : Demonstrate use and interpretation of transcutaneous bilirubin monitoring.</p>	
<p>3.23.5 : Obtain laboratory tests judiciously for management of the jaundiced infant (blood type/Coombs, total, fractionated bili, Hct, peripheral blood smear).</p>	
<p>3.23.6 : Correctly interpret test results to evaluate jaundice in the clinical setting.</p>	
<p>3.23.7 : Counsel parents about types of jaundice (physiologic, insufficient breastfeeding, breast milk, hemolytic, etc.) and their natural history.</p>	
<p>3.23.8 : Counsel parents about when to be concerned about jaundice (e.g., icterus beyond the face and chest, poor feeding, fever, irritability).</p>	
<p>3.23.9 : Discuss the current AAP practice parameters regarding diagnosis and management of the jaundiced infant.</p>	
<p>3.23.10 : Interpret the significance of a total serum bilirubin level in the context of early discharge of newborns, with reference to normative data based on age in hours.</p>	
<p>3.23.11 : Describe indications for phototherapy and exchange transfusions.</p>	

<p>3.23.12 : Describe the use of phototherapy in both the hospital and the home and explain risks (e.g., dehydration, eye injury, and disruption of breastfeeding routines).</p>	
<p>3.23.13 : Counsel parents about ways to improve jaundice at home (e.g. frequent feedings, exposure to sunlight, etc.).</p>	
<p><b>3.24 GOAL: Anticipatory Guidance at Nursery Discharge. Provide anticipatory counseling at nursery discharge that relates to newborn behavior, family adjustment, injury prevention, and access to medical services.</b></p>	
<p>3.24.1 : Discuss priorities for anticipatory counseling, especially in face of time constraints due to "early discharge."</p>	
<p>3.24.2 : List resources that can be used to supplement counseling by the physician.</p>	
<p>3.24.3 : Provide routine counseling on topics such as:</p> <ol style="list-style-type: none"> <li>1. Routine follow-up appointment time (e.g., 3-5 days of age for early discharge and breastfeeding infants)</li> <li>2. How and when to contact the office for advice or earlier appointment</li> <li>3. For infants discharged early: warning signs of jaundice, infection, dehydration, and feeding problems; interaction with visiting nurse, need to do repeat newborn screening blood tests</li> <li>4. Needed medical, social, and WIC services</li> <li>5. Normal infant behaviors related to crying, sleep, and wakefulness and how to deal with common problems (hiccups, sneezes, vaginal bleeding, breast masses/discharge, care of umbilical cord, care of penis)</li> <li>6. Postpartum adjustment including the need for rest and support, and the potential for postpartum "blues" (e.g., depression, anxiety, feelings of inadequacy, fear, resentment)</li> <li>7. Uniqueness of each infant's temperament and how to identify and respond to this</li> <li>8. Potential for sibling rivalry and ways to handle this</li> <li>9. Injury prevention (e.g., car seat for discharge, crib safety, water temperature settings, smoke alarm, constant supervision of newborn with siblings or pets, sleep position, environmental exposures like cigarette smoke)</li> <li>10. Significance of increasing jaundice, feeding problems</li> </ol>	

or fever in this age group and the rapidity with which medical care should be sought	
3.24.4 : Provide written discharge instructions, documentation of immunization (HBV) given, and results of hearing screen.	
<b>3.25 GOAL: Pediatric Competencies in Brief (Normal Newborns). Demonstrate high standards of professional competence while working with patients in the normal newborn nursery. [For details see Pediatric Competencies.]</b>	
3.25.1 : 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.	
3.25.1.1 :Use a logical and appropriate clinical approach to the care of newborns, applying principles of evidence-based decision-making and problem-solving.	
3.25.1.2 :Provide sensitive support to patients and their families in the delivery room and level 1 and 2 newborn nursery.	
3.25.2 : 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.	
3.25.2.1 :Demonstrate a commitment to acquiring the knowledge needed for the care of newborns in the delivery room and level 1 and 2 nursery.	
3.25.2.2 :Know and/or access medical information efficiently, evaluate it critically, and apply it to newborn care appropriately.	
3.25.3 : 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.	
3.25.3.1 :Provide effective patient education, including reassurance, for condition(s) common to the newborn nursery.	
3.25.3.2 :Communicate and work effectively with	

staff, health professionals, specialists, referring and primary care providers to create and sustain information exchange and teamwork for patient care.	
3.25.3.3 :Develop effective strategies for teaching students, colleagues and other professionals.	
3.25.3.4 :Maintain accurate, legible, timely, and legally appropriate medical records for newborns (summary of maternal record, labor and delivery note, admission note, daily progress notes, consultant notes and discharge summaries).	
<b>3.25.4 : 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.</b>	
3.25.4.1 :Use scientific methods and evidence to investigate, evaluate, and improve patient care practice in the nursery setting.	
3.25.4.2 :Identify standardized guidelines for diagnosis and treatment of conditions common to the newborn nursery, and adapt them to the individual needs of specific patients.	
3.25.4.3 :Identify personal learning needs, systematically organize relevant information resources for future reference, and address plans for lifelong learning about newborn care.	
<b>3.25.5 : Competency 5: Professionalism. Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to diversity.</b>	
3.25.5.1 :Demonstrate personal accountability to the well-being of patients (e.g., following-up on lab results, writing comprehensive notes, and seeking answers to patient care questions).	
3.25.5.2 :Demonstrate a commitment to professional behavior in interactions with staff and professional colleagues.	
3.25.5.3 :Adhere to ethical and legal principles, and be sensitive to diversity.	
<b>3.25.6 : Competency 6: Systems-Based Practice. Understand how to practice high-quality health care and advocate for</b>	

patients within the context of the health care system.	
3.25.6.1 :Demonstrate sensitivity to the costs of clinical care in the nursery, and take steps to minimize costs without compromising quality.	
3.25.6.2 :Recognize and advocate for families who need assistance during the hospital stay and after discharge.	
3.25.6.3 :Recognize one's limits and those of the system; take steps to avoid medical errors.	
<b>Procedures</b>	
<b>7.1. GOAL: Technical and therapeutic procedures.</b> Describe the following procedures, including how they work and when they should be used; competently perform those commonly used by the pediatrician in practice.	
Bladder: catheterization	
Breast pump use	
Capillary blood collection (PKU, hct)	
Circumcision	
Conjunctival swab	
Gastric tube placement (OG/NG)	
Lumbar puncture	
Medication delivery: IM/SC/ID	
Medication delivery: IV	
Pulse oximeter: placement	
Suctioning: nares	
Suctioning: oral pharynx	
Suctioning: trachea (newborn)	
<b>7.2. GOAL: Diagnostic and screening procedures.</b> 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.	
Hearing screening	

Monitoring interpretation: pulse oximetry	
Radiologic interpretation: chest X-ray	
<b>Source</b> 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: <a href="http://www.ambpeds.org/egweb">www.ambpeds.org/egweb</a> . [Accessed 09/26/2007]. Project to develop this website was funded by the Josiah Macy, Jr. Foundation 2002-2005.	



# Objectives for Pediatric Orthopedic Rotation.

**Goal 1: Prevention and Screening (Orthopedics). Understand the pediatrician's role in preventing and screening for orthopedic injury, disease and dysfunction.**

## **DDH:**

- Recognize the risk factors for DDH (AR).
- Perform the screening test for DDH correctly for newborns and infants (CE, AVM).
- Interpret the data from the hip US and plain radiograph (L).
- Follow the recommendation of AAP for screening infants by US. (AR)
- Detect the signs suggesting missed cases of DDH (CE, L, AR).
- Outline the treatment options for patients with DDH based on age (L).

## **Injuries:**

- Identify the injury risks of playgrounds and how to make playground safer areas for children (AR).
- Explain the importance of safety measures during using various tools and machines at home (lawn mowers, snow blowers, heaters,,,etc) (AR).

- Recognize the various hazard of motorized recreational vehicles (ATV, dirt bike,,etc) and proper safely measures for driving/riding them (AR).
- Trampoline

### **Scoliosis**

- Perform the screening test for detection of scoliosis (CE).
- Measure the degree of scoliosis on the PA radiograph using the Cobb method (CE, SGD, L).
- Identify the criteria for referring patients with suspected scoliosis to orthopedics (L, CE).
- Differentiate between scoliometer angle and cobb angle for scoliosis (L).

### **Exercise and sports:**

- Advise adolescent regarding proper ACL-injury prevention programs (AR).
- Advise families regarding safe practice of various sports (e.g.bikes, football, skateboards) and proper use of protective clothes (helmet, pads) (AR)

### **Metabolic conditions:**

- Provide adequate nutritional supervision to ensure proper level of vitamin D to protect against rickets (AR).

- Advice family about musculoskeletal consequences of child obesity (AR).

**GOAL 2: Normal vs. Abnormal (Orthopedics). Differentiate normal variants from pathologic orthopedic conditions.**

- Identify the normal pattern of growth of the Lower extremity (L, AR).
- Relate the alignment of the lower extremity to the age of the child (L).
- Distinguish between normal and pathological rotation of the lower extremity (CE,L).
- Differentiate between normal and pathological gait patterns (CE, L, AR)
- Describe the age of development foot arches (CE,L).
- Differentiate between flexible and stiff flatfoot (L, AR).
- Educate the family regarding the normal development of the children and changes that can be expected with growth (L).

**GOAL 3: Undifferentiated Signs and Symptoms (Orthopedics). Evaluate and appropriately treat or refer presenting orthopedic signs and symptoms.**

- Identify various causes for following orthopedic conditions and propose diagnostic plan to reach the diagnosis (AR, CE, BST).
  - Limping child and refusal to weight bear.
  - Extremity pain.
  - Swollen painful joints.
  - Low back pain
  - Deformed limb and unequal length of extremities

- Examine of big joints (hip, shoulder, knee) and recognize the abnormal finding in the exam (CE, L).
- Outline the musculoskeletal manifestations of general pediatric condition (L, AR, CE).
  - Neuromuscular conditions (e.g. Cerebral palsy, Myelodysplasia, Muscular dysplasia)
  - Connective tissue disorders (e.g. Marfan, Ehlar-Danlos)
  - Skeletal dysplasia (e.g. achondroplasia)
  - Metabolic conditions (e.g. rickets, Goucher's)

**GOAL 4: Common Conditions Not Referred (Orthopedics). Diagnose and manage common orthopedic conditions that generally do not require referral to an orthopedist.**

- Diagnose, treat and provide family education for the following conditions (AR, L, CE):
  - Stable buckle (torus fracture) of distal radius/ulna
  - Mechanical back pain
  - Foot syndactyly
  - Apophysitis (calcaneal, tibial tubercle, iliac apophysis)
  - Chondromalacia patellae (patellofemoral)
  - Ankle and wrist sprain
  - Primary management of sports injury
  - Nursemaid elbow

- Normal physiological condition (e.g. in toeing in young children, flat feet)
- Benign bone lesion (osteochondroma, simple bone cyst, metaphyseal cortical defect)

**GOAL 5: Recognize, provide initial management, and refer appropriately conditions that usually require orthopedic referral.**

- Diagnose the orthopedic conditions that require referral to orthopedic surgery (L, AR, CE)
  - Perthes disease
  - Congenital conditions (clubfoot, trigger thumb, hand syndactyly, constriction band, metatarsus adductus)
  - Birth injuries (Erb's Palsy)
  - DDH
  - Malignant bone conditions (osteosarcoma, Ewing's)
  - Aggressive benign bone lesions (aneurysmal bone cyst, multiple enchondromas)
  - Benign tumor
  - Osteochondritis dissecans (of femoral condyle, elbow)
  - Knee ligamentous injury.
  - Shoulder, elbow and ankle injury that fail initial conservative
  - Limb length discrepancy
  - Scoliosis (>20) and Kyphosis
  - Spondylolysis and spondylolipthesis
  - Resistant back pain
  - Excessive Rotational Deformity
  - Excessive Lower Limb Angular Deformity
  - Persistent Idiopathic Toe Walking

- Recognize the urgent orthopedic condition and promptly refer (L, BST, CE):
  - SCFE
  - Septic arthritis of the joint
  - Compartment syndromes.
  - Fractures with vascular injuries Appropriate
  - Joint dislocations
- Identify the various types of fractures (L, AR, CE).
- Manage children with osteomyelitis and recognize the indication for orthopedic referral (L, AR, BST).
- Describe the different pattern of physeal injury (L, AR, CE).
- Identify the characteristic findings with upper and lower extremities nerve injuries (AR).

**GOAL 6: Technical and therapeutic Orthopedic procedures.**

- Apply the correct method of performing the following procedures (AR, AV, P):
  - Immobilization and splinting upper and lower extremity.
  - Reduction of nursemaid elbows.
  - Arthrocentesis.
  - Cervical spine immobilization.

**GOAL 7: Diagnostic and screening Orthopedic procedures.**

- Interpret radiographs of upper extremity, lower extremity, pelvic, and spine (L,CE, SG).
- Identify characteristic radiological evidence of bone tumor, child abuse (L,CE, SG).
- Calculate the Cobb angle in scoliosis (CE).
- Differentiate between pathological and age specific normal radiological findings (L,CE, SG).
- Recognize the radiographic findings that can be accidental findings and educate the family about the prognosis (L,CE, SG)
  - simple bone cyst.
  - Osteochondroma.
  - tarsal coalition.
  - metaphyseal cortical defect.
  - pars defect.
  - spina bifida occulta.

**Goal 8: Pediatric Competencies in Brief (Orthopedic Rotation). Demonstrate high standards of professional competence while working with patients under the care of a Orthopedics:**

- 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 (CE, BST).



- Use a logical and appropriate clinical approach to the care of patients presenting for orthopedic care, applying principles of evidence-based decision-making and problem-solving (CE, BST).
- Describe general indications for orthopedic procedures and interpret results for families (CE, BST).
- 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 (SL).
- Acquire, interpret and apply the knowledge appropriate for the generalist regarding the core content of orthopedic surgery (SL).
- Critically evaluate current medical information and scientific evidence related to orthopedics and modify the knowledge base accordingly (CE, SL)
- Demonstrate interpersonal and communication skills that result in information exchange and partnering with patients, their families and professional associates (CE, BST).
- Provide effective patient education, including reassurance, for a condition(s) common to orthopedic surgery (CE, BST).
- Communicate effectively with primary care, orthopedic surgeons, trauma surgeons, physiatrists, therapist, orthotists and other health professionals, and health-related agencies to create and sustain information exchange and teamwork for orthopedic patient care (CE, BST).
- Maintain accurate, legible, timely and legally appropriate medical records, including referral forms and letters, for orthopedic patients in the outpatient and inpatient setting (CE, BST)

- Demonstrate knowledge, skills and attitudes needed for continuous self-assessment, using scientific methods and evidence to investigate, evaluate, and improve orthopedic patient care practice.
- Identify standardized guidelines for diagnosis and treatment of conditions common to pediatric orthopedics and adapt them to the individual needs of specific patients (L, CE, BST).
- Identify personal learning needs related to pediatric orthopedic; systematically organize relevant information resources for future reference; and plan for continuing acquisition of knowledge and skills (SL)
- Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to diversity (SA).
- Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to diversity (SA).
- Demonstrate a commitment to carrying out professional responsibilities (SA).
- Adhere to ethical and legal principles, and be sensitive to diversity (SA).
- Understand how to practice high-quality health care and advocate for patients within the context of the health care system (SA).
- Identify key aspects of health care systems as they apply to orthopedic care, including the referral process, and differentiate between consultation and referral (SA)
- Demonstrate sensitivity to the costs of clinical care in orthopedic setting, and take steps to minimize costs without compromising quality (SA)
- Recognize and advocate for families who need assistance to deal with systems complexities, such as the referral process, lack of insurance,

multiple medication refills, multiple appointments with long transport times, or inconvenient hours of service (SA).

- Recognize one's limits and those of the system; take steps to avoid medical errors (SA).

### **Clinical Duties:**

- The pediatric resident is expected to:
  - Study the “assigned reading” resources.
  - Attend the pediatric orthopedic outpatient’s clinics.
  - Daily round on admitted orthopedic patients.
  - Attend the daily morning orthopedic report.
- The pediatric resident in the orthopedic rotation is encouraged to:
  - Attend and scrub in pediatric orthopedic surgeries.
  - Help with ER pediatric orthopedic consultations that occur during working hours.
  - Prepare a review article on one of pediatric orthopedic topics.

### **Teaching activities (see after each objective):**

AR: assigned readings will be provided to the resident at the beginning of the rotation (Currently have most of the chapters ready, still in the final editing, can be given to the resident in the current shape with another text book).

L: Lectures (mean the orthopedic series lectures presented to residents in their academics, not necessarily in the orthopedic rotation).

BST: bed side teaching.

AVM: audiovisual module.

P: presentation.

SG: small group discussion.

CE: clinical encounter.

SL: self learning.

RM: role mode

### **Evaluations:**

According to usual six core competencies.

### **The current clinics are:**

- Three general pediatric orthopedic clinics (1 Dr Machen and two clinics myself).

- One pediatric fracture clinic (Dr Machen mostly, sometimes myself when he is not available) this is also attended by pediatric resident in the adolescent rotation.
- One spasticity (cerebral palsy clinic), currently once every two months, will change to once a month in March/April.
- Dr Machen general pediatric orthopedic clinic is Wednesday afternoon (pediatric academic time)
- There may be some changes to schedule starting late 2012 when Dr Machen becomes full time TT faculty.
- Currently, all our pediatric orthopedic clinics are in campus, however, this may change starting late 2012 or 2013. Also, there may be an increase in the number of these clinics

## **Overall Program and Educational Goals Pediatric Residency Program**

Texas Tech Health Sciences Center Paul L. Foster School of Medicine

It is our belief that Pediatricians are responsible of promoting health, treating illness and preventing injuries in infants, children and teenagers. This effort is not just limited to the patient but involves the family and the community as well.

Our main goal is to teach our residents, throughout their three years of training in general pediatrics, to achieve, develop and carry out the appropriate care for the patient, obtain the medical knowledge, understand professionalism, communicate and building up strong patient-physician relationships. We want our residents to practice medicine utilizing all the resources to become experts in an increasingly complex medical system.

Our program will provide physicians with educational experiences to obtain the necessary knowledge, skills and attitudes to become well-rounded pediatricians, and will prepare residents to be competent general pediatricians able to provide comprehensive and coordinated care to a broad range of pediatric patients.

- The residency training in pediatrics will provide three years of consecutive training involving progressive responsibilities for patient care.
- All pediatric residents are expected to be prepared to take the Board Certifying Exam in the year of their graduation, and pass on first attempt. Residents will show progress towards meeting these goals by demonstrating continuous improvement on the yearly in-training exam offered by the American Board of Pediatrics

The residents will be trained in the competencies and skills needed to practice general pediatrics of high quality in the community.

Pediatric residents trained in the program will practice with humanism, cultural sensitivity and concern for the wellbeing of patients and their families and they will become advocates for the children.

- Residents will strive to create a sense of altruism and unselfish dedication to the care of children and service to the community.
- Residents will develop a long life desire to learn and improve

Our residents will function with other members of the health care team to create an environment of collegiality and will exercise a multi-disciplinary approach to the care of children.

- Residents will excel in providing leadership and advocacy for children in their communities.
- Residents will learn to teach, to become a member of a team and to critically analyze problems to find resolutions.

Finally, the expectation from our residents are many but it is our main desire to prepare Pediatricians who are not only excellent clinicians but caring human beings as well, and most of all to enjoy every moment of learning in an environment created toward their successful career.

Our educational goals are defined with the required six competencies in mind, to provide physicians with a complete training that will enable them to be competent Pediatricians.

#### Goal 1: Patient Care

- Patient care is the foundation of pediatric residency training. Residents will learn to effectively and compassionately treat health problems and promote healthy lifestyles. Residents will develop the knowledge, skills and attitudes necessary to practice family-centered and community-centered care.

#### Goal 2: Professionalism

- Residents trained in the program will demonstrate a commitment to carry out professional responsibilities, adhere to ethical principle, and show cultural sensitivity and concern for the wellbeing of patients, their families and their communities. Residents will strive to build a sense of altruism and unselfish dedication to the care of children and service to the community.

#### Goal 3: Communication Skills

- Residents will demonstrate interpersonal and communication skills that result in an effective information exchange with patients, their families, and other professional associates. Residents will work with other members of the health care team to create an environment of collegiality and will exercise a multi-disciplinary approach to the care of children.

#### Goal 4: Evidence Base Medicine

- The residency training will prepare physicians for careers as lifelong learners. Residents will be comfortable with evidence-based clinical care. This will allow them to integrate principles of clinical epidemiology with skills in medical informatics and therefore improve decision-making at the bedside.

#### Goal 5: Medical Knowledge

- The residency training will prepare physicians to not only excel as clinicians but will provide the basis for further training in any pediatric specialty and/or academia. Furthermore, it will prepare them to be role models and an important resource in any community where they eventually practice. Formal teaching usually occurs within the didactic curriculum, but most learning takes place within clinical experiences. Therefore this competence is closely linked with competence in patient care.

#### Goal 6: System-Based Practice

- We train our residents to demonstrate an awareness of and responsiveness to the larger context and system of health care and to recognize other resource so that they provide the best health care to their patients.



## El Paso Childrens' Hospital Pediatric Intensive Care Unit Goals and Objective

**Goal:** To develop the knowledge, attitudes and skills necessary to evaluate, diagnose and manage common conditions in critically ill pediatric patients in a manner commensurate with level of training.

**Legend:** PtPr, patient presentation; CE, clinical encounter; FE, faculty evaluation; PE, peer evaluation; CR, chart review; DO, direct observation with teaching; (CC), ILP, individualized learning plan; 360 evaluation, (parent, nurse, peer, faculty); R, self initiated reading; BR, bedside teaching rounds; L, didactic lectures; SE, self evaluation; TP, topic presentation.

**Objectives:** At the end of the **PGY-2** year, the resident will:

<b>Patient Care:</b>	<b>Teaching Method</b>	<b>Evaluation Method</b>
Effectively perform a history and physical exam on critically ill pediatric patients	CE, DO, R, BR	PtPr, FE
Generate a complete problem list including both acute and chronic conditions	CE, DO, R, BR	PtPr, FE
Appropriately prioritize assessment and intervention in the patient with an emergent condition	CE, DO, R, L, BR	PtPr, FE
Create an assessment of the patient, focusing on reason(s) for admission to the PICU	CE, DO, R, L, BR	PtPr, FE
Be able to review all laboratory results and diagnostic studies on their patients and summarize the pertinent findings	CE, DO, R, BR	PtPr, FE
Be able to generate a management plan based on information gathered from the history, physical exam, and laboratory data, and based on a sound physiologic and evidence based rationale.	CE, DO, R, BR, L	PtPr, FE
Be able to perform basic and advanced life support according to American Heart Association standards	CE, DO, R, BR, L	PtPr, FE
Be able to initiate mechanical ventilation for patients with the common forms of respiratory failure	CE, DO, R, BR, L	PtPr, FE
Be able to prescribe appropriate sedatives and analgesics to critically ill patients and to post-operative patients	CE, DO, R, BR, L	PtPr, FE
Be able to initiate and titrate cardiovascularly active infusions in an appropriate manner	CE, DO, R, BR, L	PtPr, FE
Be familiar with the methods, indications, and risks of common ICU procedures, including intubation, central line insertion, arterial line insertion, chest tube insertion, and thoracentesis	CE, BR, DO, R	PtPr, FE

<b>Medical Knowledge:</b>	<b>Teaching Method</b>	<b>Evaluation Method</b>
Discuss aspects of the patient's disease process by consistent reading on the patient's diagnosis. The resident should incorporate this information into management plans	PtPr, R	PtPr, FE, PE, CR
Attend didactic conferences	Didactic/Socratic	FE
Participate in team learning by bringing relevant articles and citing relevant literature when discussing patient care	Didactic/Socratic R	PtPr, DO, FE, PE

Discuss the indications, methods, and complications of common ICU procedures and be able to assist critical care faculty in performance of procedures	CE, DO	FE
Present in depth knowledge on a topic to the team by giving a weekly didactic presentation	TP	FE

<b>Communication and Interpersonal Skills:</b>	<b>Teaching Method</b>	<b>Evaluation Method</b>
Present each patient in a logical and concise manner	PtPR	FE
Cultivate the behavior of listening to patients and families	CE,DO	FE
Demonstrate to the attending physician how to provide information to patients and families in a clear and concise manner at a level of complexity appropriate to the situation and people involved with the discussion	CE, DO	FE
Communicate with the patients' primary care physician upon admission to the ICU, discharge from the ICU and after significant events	CE, DO	FE
Maintain neat medical records with timely completion of discharges, transfer notes, and off-service summaries	CE, DO	CR
Practice effective and efficient sign-outs to on-call team	PtPr	FE

<b>Professionalism:</b>	<b>Teaching Method</b>	<b>Evaluation Method</b>
Practice respectful, altruistic and ethically sound method of practice that is patient and family centered	CE, DO	FE
Demonstrate sensitivity to family, cultural, ethnic, age, gender and community issues during any interactions with fellow physicians, patients, families and members of the health care team.	DO	FE
Take ownership for all patients on the service, not just the patients assigned, assisting other team members to ensure excellent patient care.	CE, DO	FE
Interact with the multidisciplinary health care team with integrity and respect	CE, DO	FE

<b>Practice Based Learning</b>	<b>Teaching Method</b>	<b>Evaluation Method</b>
Be able to analyze his/her practice and identify areas needing improvement in medical knowledge and/or patient care	SE, ILP	FE, Review of ILP
Demonstrate and incorporate the use of online resources in patient management	PtPR, CE	PtPr, FE,
Use of evidence based medicine principles in the selection of diagnostic testing	EBM Seminar, Journal Club	FE, DO
Participate in team learning by bringing articles and creating brief presentations for the team	Didactic / Socratic	PtPr, DO, FE

<b>System Based Practice:</b>	<b>Teaching Method</b>	<b>Evaluation Method</b>
Understand the role of the physician (resident) in the larger health care delivery system, including the role of nursing, pharmacy, and administration	Morbidity and Mortality Conference	FE
Identify appropriate criteria for admissions and discharges of	CE, DO	FE

patients to and from the ICU		
Effectively use referral for appropriate patient care (CPS, Social Services, etc)	CE, DO	FE
Effectively participate in multidisciplinary care of the patients (with nursing, respiratory therapy, physical therapy, etc)	CE, DO	FE
Participate in the monthly Department Morbidity and Mortality Conferences, recognizing that error is inherent in any medical practice	Didactic / Socratic	Attendance Logs, DO, FE

**Objectives:** At the end of the **PGY-3** year, the resident will be expected to have mastered all aspects of the PGY-2 residents. By the end of the PGY-3 year, the resident will:

<b>Patient Care:</b>	<b>Teaching Method</b>	<b>Evaluation Method</b>
Understand the pathophysiology and management of the common pediatric critical illnesses	Self study, BR, L	FE, In-service exam, PtPr
Be able to provide short term life supporting critical care to patients in the community who require stabilization awaiting transfer to a pediatric intensive care unit.	CE, DO, BR, L	FE
Be able to assist as a general pediatrician in the care of critically ill patients in consultation with critical care physicians.	CE, DO, BR, L	FE
Be proficient in running codes for pediatric patients	PALS, CE, DO	FE, PALS course, self evaluation

<b>Medical Knowledge:</b>	<b>Teaching Method</b>	<b>Evaluation Method</b>
Be able to discuss the pathophysiology and management of the most complex critically ill patients, including those with congenital heart disease, respiratory failure, shock, and those requiring artificial life support (mechanical ventilation, renal replacement therapy, ECMO)	Self study, in-service exam, board review, L, BR, CE, DO	In-service examination, FE
Understand the physiology of mechanical ventilation and be able to safely prescribe it in ARDS, ALI, status asthmaticus, and the various types of congenital heart disease. Understand the effects of mechanical ventilation on hemodynamics in unstable patients.	Self study, in-service exam, board review, L, BR, CE, DO	In-service examination, FE
Be able to discuss the pathophysiology of the various forms of shock, the identification of each, and the treatment of each	Self study, in-service exam, board review, L, BR, CE, DO	In-service examination, FE
Understand the action of the various vasopressor infusions and the indications and contraindications for each drug.	Self study, board review, L, BR, CE, DO	In-service examination, FE

<b>Communication and Interpersonal:</b>	<b>Teaching Method</b>	<b>Evaluation Method</b>
Provide specific feedback to junior house staff and medical students in a respectful and constructive manner	Feedback and evaluation	FE, PE

	module	
Be able to provide difficult news to families in a sensitive manner	CE, DO	FE
Be able to discuss end of life decisions with patients and families	CE, DO	FE
Demonstrate techniques for dealing with difficult or abusive parents or patients in a professional manner	DO	

<b>Professionalism:</b>	<b>Teaching Method</b>	<b>Evaluation Method</b>
Assume responsibility for seeing that the team is responsible to the needs of the patients and that the team work together to maintain excellent patient care at all times.	DO	FE, self evaluation
Assume responsibility for assuring that all team members maintain a professional working relationship within the teams and with other medical staff (nursing, respiratory therapy, etc).	DO	FE, self evaluation
Assume responsibility for assuring that work hours for the team members are structured to provide excellent patient care and an excellent educational environment, while also assuring that all members adhere to the duty hours policies.	Duty hours policy, DO	Duty hours surveys, FE

<b>Practice Based Learning; as per general goals and objectives for in-patient rotations:</b>	<b>Teaching Method</b>	<b>Evaluation Method</b>
Ensure that all team members attend scheduled lectures	Experiential	FE, PE, DO

<b>System Based Practice; as per general goals and objectives for in-patient rotations:</b>	<b>Teaching Method</b>	<b>Evaluation Method</b>
Explain the factors associated with appropriate in-patient billing codes and the systems in place to extract that information and generate a bill.	BR	FE, DO

**Common Conditions (PICU) for review and understanding on this rotation:**

\* denotes core topics for discussion / lecture

**Neurologic/Neurosurgical: Sedation:** Sedation\*, Seizures and status epilepticus\*, altered mental status and coma, CNS infections, hydrocephalus, ventriculoperitoneal shunts and problems, head trauma\*, vascular accidents, brain tumors

**Respiratory:** Respiratory distress and failure (ARDS\*, ALI, Airways obstruction, neuromuscular, status asthmaticus\*, pulmonary infections (bronchiolitis, pneumonia, laryngotracheobronchitis, epiglottitis, bacterial tracheitis.) basic ventilator management\*

**Cardiovascular:** Congenital heart disease, congestive heart failure, myocarditis, dysrhythmias, shock\*, basic cardiopulmonary interactions\*

**Renal:** Acute renal failure, acute kidney injury, fluid/electrolyte/nutrition disorders and issues\*.

**Endocrine:** DKA\*, thyroid dysfunction

**Gastrointestinal:** Nutrition, liver failure, gastrointestinal bleeding, appendicitis, peritonitis

**Multisystem Conditions:** Systemic Inflammatory Response Syndrome (SIRS), Sepsis and septic shock\*, anaphylaxis, autoimmune diseases, multisystem trauma\*

**Other:** Child abuse and neglect

**Resident Expectations from Faculty**

- Availability for questions and when required direct evaluation of a patient
- Consistency in rounding times when possible
- Bedside teaching of all or selected patients
- Dedication to teaching and following the standards of Evidence Based Medicine
- Didactic lectures on core topics of the rotation
- Mid service feedback
- Verbal Evaluation at the end of the service and completion of all written evaluations in a timely manner.
- A model of Professional behavior with all team members and medical staff

**Resident Curriculum  
PL-1  
Research**

**Medical Knowledge**

The competency of Medical Knowledge includes:

- demonstrate an investigatory and analytic thinking approach to clinical situations
- know and apply the basic and clinically supportive sciences which are appropriate to their discipline

**Medical Knowledge: Goals and Objectives**

**Goal #1:**

**Developing skills for the critical analysis of medical literature (including research methodology and biostatistics)**

**Objective:**

#1. Screening

**Systems Based Practice**

The competency of System Based Practice includes:

- understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice
- know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources
- practice cost-effective health care and resource allocation that does not compromise quality of care
- advocate for quality patient care and assist patients in dealing with system complexities
- know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance

**Systems Based Practice :Goals and Objectives**

**Goal #1:**

**Developing skills for the critical analysis of medical literature (including research methodology and biostatistics)**

**Objectives:**

#1 To develop knowledge in Epidemiologic and Biostatistical Methods

#2 Randomization

#3 Describing and presenting data

#4 Data analysis: estimation and hypothesis testing

#4 Confounding and stratification

#5 Screening

**Goal #2:**

**Developing skills for the critical analysis of medical literature (including writing and understanding**

scientific material)

**Objectives:**

- #1 Medical Writing
- #2 Writing a study protocol
- #3 Developing a study protocol
- #4 Searching medical literature

## **Professionalism**

The competency of Professionalism includes:

- demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development
- demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices
- demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities

## **Professionalism :Goals and Objectives**

**Goal #1:**

**Developing skills for the critical analysis of medical literature (including research methodology and biostatistics)**

**Objective:**

- #1 Ethical issues in epidemiological research

**Resident Curriculum for Providence Hospital  
PL-1  
Ward/Inpatient**

## **Patient Care**

The competency of patient care includes:

- **Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families**
- **Gather essential and accurate information about their patients**
- **Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment**
- **Develop and carry out patient management plans counsel and educate patients and their families**
- **Use information technology to support patient care decisions and patient education**
- **Perform competently all medical and invasive procedures considered essential for the area of practice**
- **Provide health care services aimed to preventing health problems or maintaining health**
- **Work with health care professionals, including those from other disciplines, to provide patient-focused care**

### **Goals**

#### **Goal #1**

**Evaluate and manage, with consultation as indicated, patients with conditions that commonly present to the Inpatient Unit**

#### **Objectives:**

1. **Endocrine: diabetes (including diabetic ketoacidosis), electrolyte disturbances secondary to underlying endocrine disease**
2. **GI/Nutrition: appendicitis, bleeding, cholangitis, complications of inflammatory bowel disease, complications of liver transplantation, cystic fibrosis, gastroenteritis (with/without dehydration), gastroesophageal reflux, hepatic dysfunction (including alpha -1 – antitrypsin disease), bowel obstruction. Pancreatitis, severe malnutrition**
3. **GU/Renal: electrolyte and acid-base disturbances, glomerulonephritis, hemolytic-uremic syndrome, nephritic syndrome, nephritic syndrome, urinary tract infection/pyelonephritis, acute and chronic renal failure**
4. **Gynecologic: sexual assault**
5. **Infectious Disease: cellulites' (including periorbital and orbital), cervical adenitis, dental abscess with complications, encephalitis, HIV, infections in immunocompromised hosts, laryngotracheobronchitis, late presentation of congenital infections (CMV, syphilis, tuberculosis, abscesses), line infection, meningitis (bacterial or viral), osteomyelitis, pneumonia (viral or bacterial), sepsis/bacteremia (including newborns). Septic, arthritis, tuberculosis**
6. **Pharmacology/Toxicology: common drug poisoning or overdose, dose adjustment for special conditions or serum drug levels**



7. **Neurology:** acute neurologic conditions (acute cerebellar ataxia, Guillain Barre syndrome, movement disorders), developmental delay with acute medical conditions, seizures, shunt infections
8. **Respiratory:** airway obstruction, asthma exacerbation, bacterial tracheitis, bronchiolitis, croup, cystic fibrosis, epiglottitis
9. **Rheumatologic:** Henoch Schonlein purpura (HSP), juvenile rheumatoid arthritis (JRA), systemic lupus erythematosus (SLE)
10. **Surgery:** pre-and post-op consultation and evaluation of surgical patients (general, ENT, orthopedics, urology, neurosurgical, etc.) special needs of technology-dependent children (blocked trachea, gastric tube dysfunction)
11. **Allergy/Immunology:** acute drug allergies/reactions, anaphylaxis, immunodeficiency's, including graft vs. host disease, recurrent pneumonia, serum sickness, severe angioedema

## Goal #2

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

### Objectives:

1. Analgesia: pain management
2. Arterial puncture
3. Central line: use/care
4. Chest physiotherapy
5. Gastric tube placement (OG/NG)
6. Gastrostomy tube replacement
7. Intravenous line placement
8. Lumbar puncture
9. Medication delivery: inhaled
10. Medication delivery : IV
11. Medication delivery: rectal
12. Pulse oximeter: placement
13. Rectal swab
14. Sterile technique
15. Suctioning: nares
16. Suctioning: oral pharynx
17. Suctioning: tracheostomy
18. Tracheostomy tube: replacement
19. Venipuncture

## Medical Knowledge

The competency of Medical Knowledge includes:

- Demonstrate an investigatory and analytic thinking approach to clinical situations
- Know and apply the basic clinically supportive sciences which are appropriate to their discipline

## Goals and Objectives

### Goal #1

Evaluate and manage, with consultation as indicated, patients with conditions that commonly present to the Inpatient Unit

#### Objectives:

1. **General:** failure to thrive, fever of unknown origin
2. **Endocrine:** diabetes (including diabetic ketoacidosis), electrolyte disturbances secondary to underlying endocrine disease
3. **GI/Nutrition:** appendicitis, bleeding, cholangitis, complications of inflammatory bowel disease, complications of liver transplantation, cystic fibrosis, gastroenteritis (with/without dehydration), gastro esophageal reflux, hepatic dysfunction (including alpha -1 –antitrypsin disease), bowel obstruction, pancreatitis, severe malnutrition
4. **GU/Renal:** electrolyte and acid-base disturbances, glomerulonephritis, hemolytic-uremic syndrome, nephritic syndrome, nephrotic syndrome, urinary tract infection/pyelonephritis, acute and chronic renal failure
5. **Infectious Disease:** cellulites' (including periorbital and orbital), cervical adenitis, dental abscess with complications, encephalitis, HIV, infections in immunocompromised hosts, laryngotracheobronchitis, late presentation of congenital infections (CMV, syphilis, tuberculosis, abscesses), line infection, meningitis (bacterial or viral), osteomyelitis, pneumonia (viral or bacterial), sepsis/bacteremia (including newborns), septic arthritis, tuberculosis
6. **Pharmacology/Toxicology:** common drug poisoning or overdose, dose adjustment for special conditions or serum drug levels
7. **Neurology:** acute neurologic conditions (acute cerebellar ataxia, Guillain Barre syndrome, movement disorders), developmental delay with acute medical conditions, seizures, shunt infections
8. **Respiratory:** airway obstruction, asthma exacerbation, bacterial tracheitis, bronchiolitis, croup, cystic fibrosis, epiglottitis
9. **Rheumatologic:** Henoch Schonlein purpura (HSP), juvenile rheumatoid arthritis (JRA), systemic lupus erythematosus (SLE)
10. **Surgery:** pre-and post-op consultation and evaluation of surgical patients (general, ENT, orthopedics, urology, neurosurgical, etc.), special needs of technology-dependent children (blocked trachea, gastric tube dysfunction)
11. **Allergy/Immunology:** acute drug allergies/reactions, anaphylaxis, immunodeficiency's, including graft vs. host disease, recurrent pneumonia, serum sickness, severe angioedema

### Goal #2

Use common laboratory studies when indicated for patients in the inpatient setting.

#### Objectives:

1. CBC with differential, platelet count, RBC indices
2. Blood chemistries: electrolytes, glucose, calcium, magnesium, phosphate
3. Renal function tests
4. Tests of hepatic function (PT, albumin) and damage (liver enzymes, bilirubin)
5. Serologic tests for infection (e.g. hepatitis, HIV)

6. C-reactive protein, erythrocyte sedimentation rate
7. Therapeutic drug concentrations
8. Coagulation studies
9. Arterial, capillary, and venous blood gases
10. Detection of bacterial, viral, and fungal pathogens
11. Urinalysis
12. Cerebrospinal fluid analysis
13. Gram stain
14. Stool studies
15. Other fluid studies (e.g. pleural fluid, joint fluid)

### **Goal #3**

Use common imaging or radiographic studies when indicated for patients on the inpatient unit.

#### **Objective:**

1. Plain radiographs of the chest, extremities, abdomen, skull, sinuses: Other imaging techniques such as CT, MRI, angiography, ultrasound, nuclear scans, contrast studies (interpretation not expected)

### **Goal #4**

**Monitoring and Therapeutic Modalities (Inpatient).** Understand how to use physiologic monitoring and special technology in the general inpatient setting, including issues specific to care of the chronically ill child.

#### **Objective:**

1. Demonstrate understanding of the monitoring techniques and special treatments commonly used in the inpatient setting, by being able to:
  - Discuss indications, contraindications and complications.
  - Demonstrate proper use of technique for children of varying ages.
  - Determine which patients need continuous monitoring or special monitoring (e.g., neurological checks).
  - Interpret and respond appropriately to results of monitoring based on method used, age and clinical situation
2. Use appropriate monitoring techniques in the inpatient setting.
  - Monitoring of temperature, blood pressure, heart rate, respirations
  - Cardiac monitoring
  - Pulse oximetry
3. Use appropriate monitoring techniques in the inpatient setting.
  - Universal precautions
  - Nasogastric tube placement
  - Administration of nebulizer medication
  - Injury, wound and burn care
  - Oxygen delivery systems
  - I.V. fluids
  - I.V. pharmacotherapy (antibiotics, antiepileptic, etc.)

- Transfusion therapy
4. Describe key issues in the inpatient and home management of the technology-dependent child with the following care needs:
    - Tracheostomy
    - Chronic mechanical ventilation
    - Chronic parenteral nutrition (HAL)
    - Gastrostomy tube for feedings
    - Permanent central venous catheter
  5. Recognize normal and abnormal findings at tracheostomy, gastrostomy, or central venous catheter sites, and demonstrate appropriate intervention or referral for problems encountered.
  6. Demonstrate the skills for assessing and managing pain. Use age-appropriate pain scales in assessment
    - Describe indications for use and side effects of common narcotic and non-narcotic analgesics.
    - Administer medications to control pain in appropriate dose, frequency and route.
    - Describe indications for and use of behavioral techniques and supportive care, and other non-pharmacologic methods of pain control.

## **Practice-Based Learning and Improvement**

The competency of Practice – Based Learning and Improvement includes:

- Analyze practice experience and perform practice-based improvement activities using a systematic methodology
- Locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems
- Obtain and use information about their own population of patients and the larger population from which their patients are drawn
- Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness
- Use information technology to manage information, access on-line medical information; and support their own education
- Facilitate the learning of students and other health care professionals

### **Goals and Objectives**

#### **Goal #1**

Evaluate and manage, with consultation as indicated, patients with conditions that commonly present to the Inpatient Unit

#### **Objectives**

1. Endocrine: diabetes (including diabetic ketoacidosis), electrolyte disturbances secondary to underlying endocrine disease
2. GI/Nutrition: appendicitis, bleeding, cholangitis, complication of inflammatory bowel disease, complication of liver transplantation, cystic fibrosis, gastroenteritis (with/without

- dehydration), gastro esophageal reflux, hepatic dysfunction (including alpha-1-antitrypsin disease), bowel obstruction, pancreatitis, severe malnutrition
3. GU/Renal: electrolyte and acid-base disturbances, glomerulonephritis, hemolytic-uremic syndrome, nephritic syndrome, nephrotic syndrome, urinary tract infection/pyelonephritis, acute and chronic renal failure
  4. Gynecologic: sexual assault
  5. Infectious Disease: cellulites' (including periorbital and orbital), cervical adenitis, dental abscess with complications, encephalitis, HIV, infections in immunocompromised hosts, laryngotracheobronchitis, late presentation of congenital infections (CMV, syphilis, tuberculosis, abscesses), line infection, meningitis (bacterial or viral), osteomyelitis, pneumonia (viral or bacterial), sepsis/bacteremia (including newborns), septic arthritis, tuberculosis
  6. Pharmacology/Toxicology: common drug poisoning or overdose, dose adjustment for special conditions or serum drug levels
  7. Neurology: acute neurologic conditions (acute cerebellar ataxia, Guillain Barre syndrome, movement disorders), developmental delay with acute medical conditions, seizures, shunt infections
  8. Respiratory: airway obstruction, asthma exacerbation, bacterial tracheitis, bronchiolitis, croup, cystic fibrosis, epiglottitis
  9. Rheumatologic: Henoch Schonlein purpura (HSP), juvenile rheumatoid arthritis (JRA), systemic lupus erythematosus (SLE)
  10. Surgery: pre-and post-op consultation and evaluation of surgical patients (general, ENT, orthopedics, urology, neurosurgical, etc.), special needs of technology-dependent children (blocked trachea, gastric tube dysfunction)
  11. Allergy/Immunology: acute drug allergies/reactions, anaphylaxis, immunodeficiency's, including graft vs. host disease, recurrent pneumonia, serum sickness, severe angioedema

## Goal #2

**Diagnostic and Screening Procedures (Inpatient).** Utilize common diagnostic tests and imaging studies appropriately in the inpatient setting.

### Objective:

1. Explain the indications for and limitations of each study
2. Know or be able to locate age-appropriate normal ranges (lab studies).

## Systems Based Practice

The competency of System Based Practice includes:

- Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of system affect their own practice
- Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources

- Practice cost-effective health care and resource allocation that does not compromise quality of care
- advocate for quality patient care and assist patients in dealing with system complexities
- know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance

## Goals and Objectives

### Goal #1

Evaluate and manage, with consultation as indicated, patients with conditions that commonly present to the Inpatient Unit

#### Objectives:

1. Endocrine: diabetes (including diabetic ketoacidosis), electrolyte disturbances secondary to underlying endocrine disease
2. GI/Nutrition: appendicitis, bleeding, cholangitis, complication of inflammatory bowel disease, complication of liver transplantation, cystic fibrosis, gastroenteritis (with/without dehydration), gastro esophageal reflux, hepatic dysfunction (including alpha-1-antitrypsin disease), bowel obstruction, pancreatitis, severe malnutrition
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11. Allergy/Immunology: acute drug allergies/reactions, anaphylaxis, immunodeficiency's, including graft vs. host disease, recurrent pneumonia, serum sickness, severe angioedema

### Goal #2

**Diagnostic and Screening Procedures (Inpatient). Utilize common diagnostic tests and imaging studies appropriately in the inpatient setting.**

**Objective:**

- 1. Recognize cost and utilization issues.**

**Resident Curriculum for Providence Hospital  
PL-2 and PL-3  
Ward/Inpatient**

## **Patient Care**

The competency of patient care includes:

PL-2 and PL-3 have the opportunity for independent evaluation, management, and Coordination of care under the guidance of faculty. Residents are responsible to act in a supervisory role under faculty guidance to PL-1. Supervising resident must document the junior residents' ability to make diagnostic and therapeutic decisions based on best evidence and to develop and carry out management plans.

- Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families
- Gather essential and accurate information about their patients
- Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
- Develop and carry out patient management plans counsel and educate patients and their families
- Use information technology to support patient care decisions and patient education
- Perform competently all medical and invasive procedures considered essential for the area of practice
- Provide health care services aimed to preventing health problems or maintaining health
- Work with health care professionals, including those from other disciplines, to provide patient-focused care

### **Goals**

#### **Goal #1**

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#### **Objectives:**

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tuberculosis, abscesses), line infection, meningitis (bacterial or viral), osteomyelitis, pneumonia (viral or bacterial), sepsis/bacteremia (including newborns). Septic, arthritis, tuberculosis

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## Goal #2

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

### Objectives:

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13. Rectal swab
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15. Suctioning: nares
16. Suctioning: oral pharynx
17. Suctioning: tracheostomy
18. Tracheostomy tube: replacement
19. Venipuncture

## Medical Knowledge

The competency of Medical Knowledge includes:

- Demonstrate an investigatory and analytic thinking approach to clinical situations
- Know and apply the basic clinically supportive sciences which are appropriate to their discipline

## Goals and Objectives

### Goal #1

Evaluate and manage, with consultation as indicated, patients with conditions that commonly present to the Inpatient Unit

#### Objectives:

1. General: failure to thrive, fever of unknown origin
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### Goal #2

Use common laboratory studies when indicated for patients in the inpatient setting.

#### Objectives:

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6. C-reactive protein, erythrocyte sedimentation rate
7. Therapeutic drug concentrations
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9. Arterial, capillary, and venous blood gases
10. Detection of bacterial, viral, and fungal pathogens
11. Urinalysis
12. Cerebrospinal fluid analysis
13. Gram stain
14. Stool studies
15. Other fluid studies (e.g. pleural fluid, joint fluid)

### Goal #3

Use common imaging or radiographic studies when indicated for patients on the inpatient unit.

#### Objective:

1. Plain radiographs of the chest, extremities, abdomen, skull, sinuses: Other imaging techniques such as CT, MRI, angiography, ultrasound, nuclear scans, contrast studies (interpretation not expected)

### Goal #4

Monitoring and Therapeutic Modalities (Inpatient). Understand how to use physiologic monitoring and special technology in the general inpatient setting, including issues specific to care of the chronically ill child.

#### Objective:

1. Demonstrate understanding of the monitoring techniques and special treatments commonly used in the inpatient setting, by being able to:
  - Discuss indications, contraindications and complications.
  - Demonstrate proper use of technique for children of varying ages.
  - Determine which patients need continuous monitoring or special monitoring (e.g., neurological checks).
  - Interpret and respond appropriately to results of monitoring based on method used, age and clinical situation
2. Use appropriate monitoring techniques in the inpatient setting.
  - Monitoring of temperature, blood pressure, heart rate, respirations
  - Cardiac monitoring
  - Pulse oximetry
  -
3. Use appropriate monitoring techniques in the inpatient setting.
  - Universal precautions
  - Nasogastric tube placement

- Administration of nebulizer medication
  - Injury, wound and burn care
  - Oxygen delivery systems
  - I.V. fluids
  - I.V. pharmacotherapy (antibiotics, antiepileptic, etc.)
  - Transfusion therapy
4. Describe key issues in the inpatient and home management of the technology-dependent child with the following care needs:
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    - Gastrostomy tube for feedings
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  5. Recognize normal and abnormal findings at tracheostomy, gastrostomy, or central venous catheter sites, and demonstrate appropriate intervention or referral for problems encountered.
  6. Demonstrate the skills for assessing and managing pain. Use age-appropriate pain scales in assessment
    - Describe indications for use and side effects of common narcotic and non-narcotic analgesics.
    - Administer medications to control pain in appropriate dose, frequency and route.
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## **Practice-Based Learning and Improvement**

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- Analyze practice experience and perform practice-based improvement activities using a systematic methodology
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- Use information technology to manage information, access on-line medical information; and support their own education
- Facilitate the learning of students and other health care professionals

### **Goals and Objectives**

#### **Goal #1**

**Evaluate and manage, with consultation as indicated, patients with conditions that commonly present to the Inpatient Unit**

## Objectives

1. Endocrine: diabetes (including diabetic ketoacidosis), electrolyte disturbances secondary to underlying endocrine disease
2. GI/Nutrition: appendicitis, bleeding, cholangitis, complication of inflammatory bowel disease, complication of liver transplantation, cystic fibrosis, gastroenteritis (with/without dehydration), gastro esophageal reflux, hepatic dysfunction (including alpha-1-antitrypsin disease), bowel obstruction, pancreatitis, severe malnutrition
3. GU/Renal: electrolyte and acid-base disturbances, glomerulonephritis, hemolytic-uremic syndrome, nephritic syndrome, nephritic syndrome, urinary tract infection/pyelonephritis, acute and chronic renal failure
4. Gynecologic: sexual assault
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6. Pharmacology/Toxicology: common drug poisoning or overdose, dose adjustment for special conditions or serum drug levels
7. Neurology: acute neurologic conditions (acute cerebellar ataxia, Guillain Barre syndrome, movement disorders), developmental delay with acute medical conditions, seizures, shunt infections
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10. Surgery: pre-and post-op consultation and evaluation of surgical patients (general, ENT, orthopedics, urology, neurosurgical, etc.), special needs of technology-dependent children (blocked trachea, gastric tube dysfunction)
11. Allergy/Immunology: acute drug allergies/reactions, anaphylaxis, immunodeficiency's, including graft vs. host disease, recurrent pneumonia, serum sickness, severe angioedema

## Goal #2

Diagnostic and Screening Procedures (Inpatient). Utilize common diagnostic tests and imaging studies appropriately in the inpatient setting.

### Objective:

1. Explain the indications for and limitations of each study
2. Know or be able to locate age-appropriate normal ranges (lab studies).

## Systems Based Practice

The competency of System Based Practice includes:

- Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of system affect their own practice
- Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources
- Practice cost-effective health care and resource allocation that does not compromise quality of care
- advocate for quality patient care and assist patients in dealing with system complexities
- know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance

## Goals and Objectives

### Goal #1

Evaluate and manage, with consultation as indicated, patients with conditions that commonly present to the Inpatient Unit

#### Objectives:

1. Endocrine: diabetes (including diabetic ketoacidosis), electrolyte disturbances secondary to underlying endocrine disease
2. GI/Nutrition: appendicitis, bleeding, cholangitis, complication of inflammatory bowel disease, complication of liver transplantation, cystic fibrosis, gastroenteritis (with/without dehydration), gastro esophageal reflux, hepatic dysfunction (including alpha-1-antitrypsin disease), bowel obstruction, pancreatitis, severe malnutrition
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10. Surgery: pre-and post-op consultation and evaluation of surgical patients (general, ENT, orthopedics, urology, neurosurgical, etc.), special needs of technology-dependent children (blocked trachea, gastric tube dysfunction)

**11. Allergy/Immunology: acute drug allergies/reactions, anaphylaxis, immunodeficiency's, including graft vs. host disease, recurrent pneumonia, serum sickness, severe angioedema**

**Goal #2**

**Diagnostic and Screening Procedures (Inpatient). Utilize common diagnostic tests and imaging studies appropriately in the inpatient setting.**

**Objective:**

- 1. Recognize cost and utilization issues.**

## Community Health Rotation Goals and Objectives: 2011 Revised

<b>Goal: Provide community-based care that emphasizes health needs of underserved children, which includes knowledge of community resources, recognizing barriers to access to care, and improving access to continuous, comprehensive care.</b>				
<b>Objectives</b>	<b>PGY</b>	<b>Location</b>	<b>Evaluation</b>	<b>Teaching Method</b>
§ Understand community-oriented versus patient-oriented practice, and explain methods used to emphasize needs of community.	1, 2	Family Violence Center, Child Crisis Center, Family Planning, Advocacy Center WIC	Director of Community Health Rotation and community site coordinators	Site visits in community
§ Identify agencies that provide health-related services to children in the home or schools.	1, 2			
§ Discuss similarities, differences, and importance of agencies that provide health services to children.	1, 2			
§ Give examples of differences in case management and practice in different health care settings.	1, 2			
<b>Goal: Understand how the environment affects child health, recognize ways to prevent and treat child exposure to hazards or toxicants.</b>				
<b>Objectives</b>	<b>PGY</b>	<b>Location</b>	<b>Evaluation</b>	<b>Teaching Method</b>
§ Understand where to find information about risk factors and common sources for exposure, physiologic and developmental effects, treatment and management, and list resources for information on environmental health issues.	1, 2			



<p>§ Identify strategies for prevention and provide anticipatory guidance for various hazards (lead, carbon monoxide, air and water pollutants, etc).</p>	<p>1, 2</p>			
<p><b>Goal: Understand pediatrician's role in disease and injury prevention, which includes prevention of child abuse and neglect, violence, and substance abuse through counseling and community intervention.</b></p>				
<p><b>Objectives</b></p>	<p><b>PGY</b></p>	<p><b>Location</b></p>	<p><b>Evaluation</b></p>	<p><b>Teaching Method</b></p>
<p>§ Identify individual and environmental factors that put children at risk for physical/sexual abuse, neglect, or psychological/emotional abuse.</p>	<p>1, 2</p>	<p>Family Violence Center, Child Crisis Center, Women's Resource Center, Family Planning, Advocacy Center, University Behavioral Health of El Paso, WIC</p>	<p>Director of Community Health Rotation and community site coordinators</p>	<p>Site visits in community</p>
<p>§ Advocate for child abuse/violence/substance abuse prevention by supporting community prevention efforts by working with local organizations, or organizing collaborative projects.</p>	<p>1, 2</p>			
<p>§ Describe incidence, age distribution, and risk factors for child abuse, domestic/youth violence, and substance abuse.</p>	<p>1, 2</p>			
<p>§ Describe community programs that prevent and address domestic/youth violence and how the pediatrician can refer to the programs and support their work.</p>	<p>1, 2</p>			
<p>§ Explain how to manage victims of sexual assault through appropriate a) history and documentation, b) physical exam or forensic exam, c) treatment for STDs, d) counseling, and work with multidisciplinary team to address psychological and legal needs.</p>	<p>1, 2</p>			
<p>§ Differentiate between normal and abnormal conditions in screening for abuse/neglect, substance abuse</p>	<p>1, 2</p>			

§ Manage and refer children presenting signs and symptoms of abuse/neglect	1, 2			
§ Recognize when to refer children presenting signs and symptoms of abuse/neglect.	1, 2			
§ Recognize when to refer when to refer substance abuse cases, or children and families at risk for substance abuse.	1, 2			
<b>Goal: Understand pediatrician's role in regional EMS for children, handling mass casualties, and disaster preparedness.</b>				
<b>Objectives</b>	<b>PGY</b>	<b>Location</b>	<b>Evaluation</b>	<b>Teaching Method</b>
§ Advocate for children and families to include appropriate community response planning for children including schools and child care organizations	1, 2	Family Violence Center, Child Crisis Center, Family Planning, Advocacy Center	Director of Community Health Rotation and community site coordinators	Site visits in community
§ Understand pediatrician's role in early identification, emergency planning and response for children.	1, 2	WIC, Riverside clinic,		



# Curriculum for SCN Rotations

## **Pediatric Resident NICU Rotation and Educational Experience**

The overall goal for the pediatric or family practice resident in the special care nursery rotation is to obtain experience in recognition, assessment and care of high-risk, low-birth-weight, preterm infants  $\geq 28$  weeks and term neonates who require intensive or intermediate care, surgery or evaluation by other pediatric specialists. Initially the interns care will be introduced to ill term or near term newborns and during each additional rotation will increase the experience of caring for more ill newborns.

## **Contacts**

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## **A. First Year Pediatric Residents**

The following first year goals are focused on the special learning needs of the pediatric or family practice intern. These should allow the resident to gain experience in the care of ill intermediate care infants during the first rotation and exposure and experience with the sicker ICN neonate in the second rotation. The expectation of a first year resident is medical knowledge and comprehension of the newborn pathophysiology. The first year residents are expected to develop their own differential diagnoses and it is anticipated they will need some guidance in the formulation of management plans.

## **Competencies**

**Competency 1 Patient Care:** Provide family-centered patient care that is compassionate and effective for the treatment of health problems and the promotion of health in the sick or borderline preterm newborn. The resident should use a logical and appropriate approach to the assessment and daily management of ill neonates and their families, under the guidance of a neonatologist. They should use evidence-base decision-making and problem solving skills. They should provide emotional, social and culturally sensitive support to families of the SCN

infants.

**Goals/Competencies the first year residents are expected to obtain:**

- A. Goal: Gathering data by physical examination.** Perform an appropriate physical exam, demonstrating technical proficiency and sensitivity to the needs of the infant and family, as well as the clinical situation.

**Learning Objectives:**

- 1) Perform physical examination of the preterm, term, and sick neonate of all post-conceptual ages. Recognize how these exams differ from older infants and children.
- 2) Assess the estimated gestational age using the Ballard exam on all newborns admitted under your care and know the limitations of the Ballard exam.
- 3) Demonstrate examination strategies for evaluating the critically ill neonate e.g., the accurate examination of an infant with an acute abdomen.

- B. Goal: Obtaining a thorough family and maternal history.** This includes pertinent information regarding prior pregnancies, current pregnancy and events related to labor and delivery. Learn the resources such as maternal chart and OB colleague as sources of information such as procedures, tests and medication given for a previous admission.

**Learning Objectives:**

- 1) Identify pertinent maternal prenatal labs and conditions from the maternal charts and OB colleague questioning and document this information in the SOC EMR and verbally on rounds.
- 2) Recount the events of the delivery in an accurate, concise/organized manner in the EMR and verbally on rounds. The intern should demonstrate an understanding of the consequences of perinatal events.

- C. Goal: Using diagnostic studies.** This includes procedures or laboratory data such as radiological procedures, surgical diagnostic procedures and laboratory procedures to assess patients and monitor treatment while understanding the potential invasiveness, risks and cost of tests ordered.

**Learning Objectives:**

- 1) Obtain diagnostic studies at an appropriate time and in an appropriate sequence.
- 2) Select invasive or painful methods only when necessary.
- 3) Interpret common test results in terms of underlying pathophysiology, disease severity and clinical context of specific patient.
- 4) Recognize the need for phototherapy, monitor bilirubin levels appropriately.
- 5) Know or be able to locate age appropriate normal values for common tests.
- 6) Explain medical tests and procedures to the parents in terms they can understand, including indications, contraindications, potential complications, and results; provide information in a supportive manner that enables them to participate actively in care plans.

- D. Goal: Using and understanding how to use the physiologic monitoring.** This includes

special technology and therapeutic modalities used commonly in the care of the fetus and newborn.

**Learning objectives:**

- 1) Demonstrate appropriate use and interpretation of data from the following monitoring and therapeutic techniques in the NICU: physiologic monitoring of temperature, pulse, respiration, blood pressure, pulse oximetry, neonatal pain and drug withdrawal scales.

**E. Goal: Under the supervision of a neonatologist, order and understand the indications for, limitations of, and interpretation of laboratory and imaging studies unique to the NICU setting.**

**Learning Objectives:**

- 1) Appropriately interpret the following studies:
  1. Serologic and other studies for transplacental infection.
  2. Direct and indirect Coombs tests.
  3. Neonatal drug screening.
  4. Cranial ultrasound for intraventricular hemorrhage.
  5. Abdominal X-rays for placement of umbilical catheters.
  6. CXR for endotracheal tube placement, air leak, heart size, and pulmonary vascularity.
- 2) Use appropriately (for age) the following laboratory tests when indicated for patients in the neonatal intensive care setting:
  1. CBC with differential, platelet count, RBC indices.
  2. Blood chemistries: electrolytes, glucose, calcium, magnesium, phosphate.
  3. Renal function tests.
  4. Test of hepatic function (PT, albumin) and damage (liver enzymes, direct bilirubin).
  5. Serologic tests for infection (e.g., hepatitis, HIV).
  6. Therapeutic drug concentrations.
  7. Coagulation studies: platelets, PT/PPTT, fibrinogen, fibrin split products, D-dimers, DIC screen.
  8. Arterial, capillary, and venous blood gases understanding limitations of each source.
  9. Detection of bacterial, viral, and fungal pathogens.
  10. Urinalysis.
  11. CSF analysis for various infections causing meningitis/encephalitis in the newborn.
  12. Gram stain.
  13. Stool studies.
  14. Toxicology screens/drug levels.
  15. Other fluid studies (e.g., pleural fluid, joint fluid).
  16. Newborn screening tests.

**F. Goal: Using therapeutics and medications safely and effectively, applying sound principles of medical practice and professional ethics.** Effectively use common

therapies within the scope of neonatology, including a variety of prescription and non-prescription medications, intravenous fluids, and inhalation treatments, as well as special diets and nutritional supplements.

**Learning Objectives:**

- 1) Use up-to-date resources, (including our NICU pharmacist), for information on drug selection, action, dosing, side effects and contraindications, recognizing advantages and limitations of different resources (e.g., pharmacologists, pharmacists, professional colleagues, information from pharmaceutical companies, text books, newsletters and websites).
- 2) Recognize common causes of medication error, adhere to policies and guidelines established to ensure safe medication use, and participate in efforts to reduce error through systems improvement.
- 3) Explain the appropriate indications for and potential risks of various blood products (e.g., red blood cell products, platelets concentrates, coagulation factors).

**G. Goal: Prescribing and performing competently all medical procedures considered essential for the scope of a PL1;** be familiar with those procedures commonly used by neonatologists.

**Learning Objectives:**

- 1) Demonstrate appropriate use of oxygen administration by hood, CPAP assisted ventilation, nasal cannula and high flow nasal cannula, including when to wean.
- 2) Demonstrate skills necessary to perform endotracheal intubation in the ICN under supervision, including correct head positioning, handling of the laryngoscope.
- 3) Demonstrate proficiency in basic ventilator management, respond to blood gasses appropriately.
- 4) Participate in umbilical arterial and venous catheterization.
- 5) Recognize when an infant needs TPN, and demonstrate competence in ordering central and peripheral TPN.
- 6) Identify the necessary procedures, equipment, and calculations required for a partial exchange reduction and exchange transfusions.

**H. Goal: Developing skills in family/patient education and counseling by promoting a therapeutic alliance with families by providing counseling, guidance, and patient education in areas important to child health and disease.**

**Learning Objectives:**

- 1) Counsel families in the presence of the attending, in a supportive manner so they can understand their illness or injury and its treatment, share in decision-making, make informed consent and participate actively in the care plan.
- 2) Provide effective preventive health care and anticipatory guidance to families.
- 3) Explain common medical procedures and medical test results to parents.

**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.

**Goals/Competencies the first year residents are expected to obtain:**

**A. Goal: Demonstrate the knowledge base expected of general pediatricians caring for ill neonates under the guidance of a neonatologists.**

**Learning Objectives:**

1. Demonstrate the ability to access medical information efficiently, evaluate it critically, and apply it appropriately to the care of ill newborns.
2. Demonstrate effective strategies to access the information needed for effective patient care.

**B. Goal: Common signs and symptoms (IMCN). Identify and comprehend under the supervision of a neonatologist, common signs and symptoms of disease in borderline premature and ill newborns.**

**Learning Objectives:**

1. Recognize and manage the following general signs and symptoms: feeding problems, history of maternal infection or exposure, hyperthermia, hypothermia, intrauterine growth failure, irritability, jitteriness, large for gestational age, lethargy, poor post-natal weight gain, prematurity (various gestational ages) and formulate a management plan.
2. Demonstrate an understanding of, and attempt to manage the following cardiorespiratory signs and symptoms: apnea, bradycardia, cyanosis, dehydration, heart murmur, hypertension, hypotension, hypovolemia, poor pulses, respiratory distress (flaring, grunting, tachypnea), shock.
3. Exhibit basic recognition of the following dermatologic signs: birthmarks, common skin rashes/conditions, discharge and/or inflammation of the umbilicus, hyper and hypopigmented lesions, proper skin care for VLBW premature infants.
4. Demonstrate effective strategies to respond appropriately to the following GI/surgical signs and symptoms: abdominal mass, bloody stools, diarrhea, distended abdomen, failure to pass stool, gastric retention or reflux, hepatosplenomegaly, vomiting.
5. Identify the features associated with the following genetic/metabolic signs and symptoms: apparent congenital defect or dysmorphic syndrome, metabolic derangements (glucose, calcium, acid-base, urea, amino acids, etc.).
6. Demonstrate knowledge of the pathophysiology behind and propose treatment plans for the following hematologic signs and symptoms: abnormal bleeding, anemia, jaundice in a premature or seriously ill neonate, neutropenia, petechiae, polycythemia, thrombocytopenia.
7. Identify the following musculoskeletal signs and symptoms when present: birth defects and deformities, birth trauma and related fractures and soft tissue injuries, dislocations.
8. Recognize the presence of the following neurologic signs and symptoms: birth trauma related nerve damage, early signs of neurologic impairment, hypotonia, macrocephaly, microcephaly, seizures, spina bifida.



9. Demonstrate sensitivity towards parental stress and dysfunction: anxiety disorders, child abuse and neglect, poor attachment, postpartum depression, substance abuse, teen parent.
10. Identify the following renal/urologic signs and symptoms when present on exam: abnormal genitalia, edema, hematuria, oliguria, proteinuria, renal mass.

C. **GOAL: Working with Consultants**. Use consultations and referrals effectively in a variety of settings. Recognize the limits of one's knowledge and expertise by seeking information needed to answer clinical questions and using consultants and referrals appropriately. Use this process to guide life-long learning plans.

**Learning Objectives:**

1. Demonstrate appropriate use and selection of specialists/consultants.
2. Demonstrate an ability to construct clear questions directed towards the consultant, as well as providing sufficient background information (history, lab reports, etc.) to enable the consultation to be as effective and efficient as possible.
3. Demonstrate the ability to assess, critique and integrate recommendations of the consultant and use them as appropriate in the care of your patient.

**COMPETENCY 3.**

**Communication skills:** Demonstrate interpersonal and communication skills that result in information exchange and partnering with patients, their families and professional associates

**Goals/Competencies the first year residents are expected to obtain:**

A. **GOAL: Core communication skills**. Effectively and empathetically communicate with children and families.

**Learning Objectives:**

1. Demonstrate effective communication with families to create and sustain a therapeutic relationship across the broad range of socioeconomic and cultural backgrounds.
2. Explain patient care plans and prognoses using words that are easy for the family to understand and avoid medical jargon. Check for mutual understanding of treatment plan and ask if the family has any questions.

B. **GOAL: Professional Communication and Collaboration**. Communicate and collaborate effectively as part of a functional team with physicians, other health professionals, staff, and students.

**Learning Objectives:**

1. Demonstrate the ability to communicate and work in an effective and collaborative manner with:
  - Members of an interdisciplinary health care team.
  - Other healthcare professionals, including those in the community and complementary and alternative medicine providers who are treating the patient.

- Specialists (when functioning as the referring physician), referring physicians and primary care providers (when functioning as a specialist in the care of children).
  - Support and administrative staff
  - Medical students.
2. Demonstrate the knowledge of the various roles of team members and utilize their skills appropriately.
  3. Demonstrate effective interactions with team members by establishing mutually agreed upon goals, roles and procedures (decision making, role and goal negotiation, addressing team differences and conflicts).
  4. Demonstrate skill in avoiding and reducing interpersonal conflict.
  5. Demonstrate respect, sensitivity and responsiveness to colleagues' gender, age, ethnicity, culture, religion/spirituality, disabilities, and sexual orientation. Demonstrate thoughtfulness, kindness, honesty, integrity, humility, and fairness in working with peers, other professionals, and staff.
  6. Communicate effectively in the following contexts:
    - Brief oral case presentations (e.g., at morning report/check-in, inpatient work rounds, clinic visits; phone contacts with primary provider or consultants).
    - Written, dictated, and computerized medical records (accurate, complete, timely, legal).
    - Oral presentations to healthcare professionals.
- C. **GOAL: Medical records.** Maintain accurate, legible, timely, and legally appropriate medical records when caring for patients.

**Learning Objectives:**

1. Demonstrate maintenance of accurate, legible, timely, and legally appropriate medical records including:
  - History, including past medical, family, social history (including use of complementary and alternative therapies), review of systems, and risk assessment.
  - Physical examination appropriate for the conditions.
  - Problem list or working, differential, and final diagnosis.
  - Initial and updated plans.
  - Detailed procedure notes for procedures performed.
  - Accurate, timed record of all medications and fluids given.
  - Results of all studies ordered.
  - Condition of patient at the time of office visit, or hospital admission, observation, or discharge.
  - Where appropriate, written discharge instructions to the caretakers in a form understandable to them.
  - Written documentation of patient education techniques used during the course of treatment.
2. Document in writing in a consistent manner in a fashion that complies with Medicaid/Medicare and HIPAA standards and other legal requirements.

**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.

**Goals/Competencies the first residents are expected to obtain:**

- A. Goal: Habit of Life-long Learning.** Develop knowledge, skills and attitudes needed for life-long learning and self-assessment, and recognize key issues about continuing education and recertification processes for pediatricians.

**Learning Objective:**

1. Demonstrate effective approaches to acquiring new information.
2. Assess one's own strengths and weaknesses with respect to professional knowledge and skills, and identify a process to remediate or make allowance for them in information gathering, decision-making, and professional development.
3. Identify one's knowledge gaps in the course of providing patient care, and cultivate the habit of continuous inquiry to expand one's knowledge of medical advances.
4. Seek and incorporate feedback and self-assessment into a plan for professional growth as well as provide constructive feedback to others.

**COMPETENCY 5.**

**Professionalism:** Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to diversity.

**Goals/Competencies the first residents are expected to obtain:**

- A. Goal: Work Habits and Professional Responsibility.** Develop responsible and productive work habits encompassing the broad responsibilities of a competent pediatrician.

**Learning Objectives:**

1. Demonstrate appropriate level of responsibility of patient care decisions and duties.
2. Demonstrate maintenance of responsibility for patient care when going off duty until suitable coverage is secured.
3. Transfer information for patient care, responsibly and effectively at the time of sign out and change of service.
4. Perform duties such as completing charts, returning calls, and making referrals in a timely manner.
5. Demonstrate recognition, consequences, and actions for appropriate responsible response towards personal errors.
6. Demonstrate organization of work with resultant effective time management.
7. Demonstrate a positive attitude in dealing with work-related problems.
8. Delegate patient care duties to other members of the healthcare team appropriately and work collaboratively to ensure that the patient's needs are met.
9. Demonstrate honesty and integrity in professional duties.
10. Demonstrate consistent use of compassion and empathy in interactions with families and team members.
11. Demonstrate effective coping and limit-setting, maintenance of professional

- boundaries in interactions with patients, family, staff, and professional colleagues.
12. Demonstrate behavior that indicates prioritization of patient and family needs over those that are self-directed.
  13. Identifies strategies to promote a healthy lifestyle, fostering behaviors that help balance personal goals and professional responsibilities.
  14. Recognize and respond to personal stress and fatigue that might interfere with professional duties by asking for support and guidance when indicated.

B. **Goal: Cultural, Ethnic, and Community Sensitivity.** Understand and appreciate cultural diversity in patients and recognize the health-related implications of cultural and religious beliefs and practices of groups represented in a community.

**Learning Objectives:**

1. Offer and provide language assistance services (including bilingual staff and interpreter services) in a timely manner to each patient and family with limited English proficiency.
2. Demonstrate ease and competence in the use of a trained medical interpreter by telephone and in person.
3. Assist families in accessing religious support systems in the context of their own faith when they are in unfamiliar medical settings.

**COMPETENCY 6.**

**Systems-Based Practice:** Understand how to practice quality health care and advocate for patients within the context of the health care system.

**Goals/Competencies the first year residents are expected to obtain:**

A. **Goal: Medical Errors and Patient Safety.** Understand the importance of error reduction in medical practice.

**Learning Objectives:**

1. Discuss the importance of reducing pharmacy errors in pediatric practice and identify mechanisms for reducing these errors.
2. Honestly acknowledge an error when it has occurred, and assess the circumstances that led to it. When a preventable medical error occurs, demonstrate the following responses:
  - Explore error without assigning blame.
  - Differentiate between individual-based errors (e.g., lack of knowledge or skill, stress, fatigue) from system-based errors (e.g., inadequate information systems, poor staff management, patient's lack of medical home).
  - Identify latent conditions that may result in errors and propose interventions to reduce or eliminate such risks. Identify how and to whom they should be reported.
  - Describe methods used in evaluating errors (e.g., sentinel event reporting, root-cause analysis, fish-bone diagrams).

**B. SECOND YEAR PEDIATRIC RESIDENT**

The rotation as a first year resident through the Neonatal Intensive Care Nursery introduces the intern to the borderline preterm and sick term infant as well as understanding normal newborn physiology. They learned the care of sick infants, without major complications and develop the ability to recognize an ill infant requiring intervention. In the second year the first rotation is directed toward understanding the physiology and pathophysiology of the neonate during various aspects of a disease process. The majority of your time will be spent taking care of infants in the intensive care nursery and following up with caring for them during their recovery in intermediate care nursery. You will also improve your evaluation and resuscitation skills in labor and delivery, procedural skills and expand your knowledge of diseases during pregnancy that affect the newborn.

## Competencies

### Competency 1.

**Patient Care:** Provide family-centered patient care that is developmentally age appropriate, compassionate, and effective for the treatment of health problems and the promotion of health. Use a logical and appropriate approach to the assessment and daily management of seriously ill neonates and their families, under the guidance of a neonatologist, using evidence-based decision making and problem-solving skills. Provide emotional, social, and culturally sensitive support to families of critically ill infants.

#### Goals/Competencies the second year residents are expected to obtain:

A. **GOAL: Diagnostic Studies, Procedures and Laboratory Data.** Use diagnostic studies such as laboratory, radiologic exams, and procedures to assess patients and monitor treatment, understanding the potential risk of invasiveness and cost of tests ordered.

#### Learning Objectives:

1. Identify risks and benefits for common diagnostic studies and procedures. Be able to defend your choice of any invasive, painful, or expensive diagnostic test or procedure in terms of risk and benefits to patients.
2. Discuss general cost of diagnostic tests and procedures and consider cost when selecting these tests/procedures.

B. **GOAL: Decision-making and Clinical Judgment** Make informed diagnostic and therapeutic decisions based on patient information, current scientific evidence and clinical judgment, using clinical problem-solving skills, recognizing the limits of one's knowledge and expertise, gathering appropriate information and using colleagues and consultants appropriately.

#### Learning Objectives:

1. Demonstrate the ability to use up-to-date scientific evidence critically to develop sound, evidence-based patient care plans.
2. Interpret the pathophysiologic processes of a disease and its treatment, especially when faced with new and unexpected clinical situations.
3. Recognize clinical situations in which it is appropriate to accept uncertainty; prioritize the needs of patients.

4. Recognize when immediate treatment is needed or when it is appropriate to simply observe, or change treatment plans.

C. **GOAL: Develop and carry out patient care plans, using principles of evidence-based decision-making and appropriate prioritization, and taking into account the needs, beliefs and resources of patient and family.**

**Learning Objectives:**

1. Formulate patient care plans, cite the rationale or reasoning behind the care plan on rounds.
2. Apply evidence-based medicine in designing patient care plans.
3. Prioritize labs, and diagnostic procedures according to the patient's condition.

D. **GOAL: Prescribe and perform competently all medical procedures considered essential for the scope of general pediatric practice; be familiar with those procedures commonly used by neonatologists.**

**Learning Objectives:**

1. Demonstrate appropriate use of oxygen administration by good, CPAP or assisted ventilation including when to wean.
2. Perform endotracheal intubation in the ICN and in the delivery room, troubleshoot difficulties in performance.
3. Demonstrate proficiency in complex ventilator management, including conventional mechanical ventilation and high-frequency oscillation.
4. Apply phototherapy appropriately, recognize the need for IVIG and exchange transfusions when phototherapy fails.
5. Perform umbilical arterial and venous catheterization.
6. Participate in surfactant administration.
7. Discriminate the need for analgesia, sedation, and paralysis.
8. Manage continuous, vasoactive medication administration.
9. Perform arterial puncture when appropriate.
10. Participate in chest tube placement or understand the procedure and risks as well as when the procedure is necessary.
11. Perform a suprapubic bladder aspiration, know procedure, the risk and rationale over other procedures of obtain urine for culture.
12. Manage central line care, be aware of risks and complications and be knowledgeable of central line care bundles.
13. Apply the principles of the Neonatal Resuscitation Program (NRP) appropriately.
14. Perform Lumbar puncture understanding the procedure as well as risks and complications.

E. **GOAL: Patient Education and Counseling.** Develops skills in promoting a therapeutic alliance with patients and families by providing counseling, guidance, and patient education in areas important to child health and disease.

**Learning Objectives: (In the presence of an Attending Physician)**

1. Provide effective education via written, visual, and hands-on techniques (e.g., demonstrations, models, handouts, videotapes, and group learning sessions), selecting an educational method that is directed to the patient's or family's learning style, language limitation, knowledge level, cultural background, and emotional state.
2. Summarize the key topics or issues at the end of the session, and verify that the patient or parent understands the information presented.
3. Demonstrate an ability to sensitively assess the patient's and family's concerns and fears, and discuss these in a sympathetic and constructive fashion.

F. **GOAL: Managing and Advocating for the Whole Patient.** Provide humane care that is compassionate, altruistic, and respectful in addressing the needs of the whole patient.

**Learning Objectives:**

1. Demonstrate commitment to appropriately inform and communicate with families, taking into account their perspective, their needs, and their socioeconomic status, cultural context, and religious and spiritual beliefs.
2. Demonstrate efficient and organized work habits that allow time for regular face-to-face or telephone communication with families.

G. **GOAL: Death, Acute Illness/Injury and Terminal Illness.** Provide skillful medical care and empathic support to the acutely ill, injured or terminally ill neonate and his/her family.

**Learning Objectives:**

1. Demonstrate an understanding of the goals of treatment, including relevant medical, legal, and psychosocial issues such as: Involving parents in decision-making processes; Redirection of the goals of care; "Do Not Resuscitate" orders and termination of life support; Concepts of futility, withdrawal, and withholding of care. Actively participate in decision making by asking questions and contributing to discussions on rounds.
2. Describe the stages of the normal grieving process.

**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.

**Goals/Competencies the second year residents are expected to obtain:**

A. **GOAL: Common Conditions in the NICU.** Recognize and manage, under the supervision of a neonatologist, the common conditions in patients encountered in the NICU.

**Learning Objectives:**

1. Recognize, diagnose, and manage congenital malformations.
2. Formulate a management plan for various cardiovascular conditions: cardiomyopathy, congenital heart disease (cyanotic and acyanotic, e.g., common disorders such as patent ductus arteriosus, ventricular septal defect, tetralogy of Fallot, transposition of the great arteries), congestive heart failure, arrhythmias (e.g., supraventricular tachyarrhythmia,

complete heart block), pericarditis.

3. Detect and verify the following genetic and endocrine disorders: abnormalities discovered from neonatal screening programs as they affect the premature infant, common chromosomal anomalies, (trisomy 13, 18, 21, Turner's), inborn errors of metabolism, infant of a diabetic mother, infant of a mother with thyroid disease (e.g. maternal Graves Disease), uncommon conditions such as congenital adrenal hyperplasia, hypothyroidism, hyperthyroidism.
4. Recognize and manage these GI/nutrition issues: biliary atresia, breast feeding support for mothers and infants with special needs (high risk premature, maternal illness, multiple birth, etc.), complications of umbilical catheterization, gastroesophageal reflux, growth retardations, hepatitis, hyperbilirubinemia, meconium plug, necrotizing enterocolitis, nutritional management of high risk neonates or those with special needs (cleft lip/palate, other facial anomalies, etc.).
5. Describe the pathophysiology and management of these hematologic conditions: coagulopathy of the newborn, erythroblastosis fetalis, hemophilia, hydrops fetalis, hyperbilirubinemia, splenomegaly.
6. Assess and justify the plan for managing the following infectious disease conditions: central line infections, Group B Streptococcal infections, hepatitis, herpes simplex, immunization of the premature neonate, infant of a mother with HIV, intrauterine viral infection, neonatal sepsis and meningitis, nosocomial infection in the NICU, syphilis, ureaplasma, varicella exposure.
7. Evaluate and manage these neurologic disorders: central apnea, CNS malformations (e.g., encephalocele, proencephaly, holoprosencephaly), drug withdrawal, hearing loss in high risk newborns (prevention and screening), hydrocephalus, hypoxic-ischemic encephalopathy, intraventricular hemorrhage, retinopathy of prematurity, seizures, spina bifida.
8. Troubleshoot and manage the following pulmonary disorders: atelectasis, bronchopulmonary dysplasia, meconium aspiration, persistent pulmonary hypertension of the newborn, pneumonia, pneumothorax, respiratory distress syndrome, transient tachypnea of the newborn.
9. Recognize and manage these renal disorders: acute and chronic renal failure, hematuria, hydronephrosis, oliguria, and proteinuria.
10. Evaluate and manage surgical issues [assess and participate in management under supervision of a pediatric surgeon or cardiac surgeon/pediatric cardiologist]: congenital heart disease, (cyanotic, patent ductus arteriosus, obstructive left-sided cardiac lesions, pre and post-operative care), diaphragmatic hernia, esophageal or bowel atresia, gastroschisis, omphalocele, intestinal obstruction, necrotizing enterocolitis, perforated viscus, Pierre Robin syndrome, volvulus.

B. **GOAL: Resuscitation and Stabilization (NICU).** Assess, resuscitate and stabilize critically ill neonates.

**Learning Objectives:**

1. Explain and perform steps in resuscitation and stabilization, particularly airway management, vascular access, volume resuscitation, indications for and techniques of chest compressions, resuscitative pharmacology and management of meconium



deliveries.

2. Describe the common causes of acute deterioration in previously stable NICU patients.
3. Participate in codes and neonatal resuscitations as part of the NICU team.

### **COMPETENCY 3.**

**Practice-Based Learning and Improvement:** Residents must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. (See first year pediatric resident goals and objectives).

**Goals/Competencies the second year residents are expected to obtain:**

- A. **GOAL:** Use scientific methods and evidence to investigate, evaluate, and improve one's patient care practice in the NICU setting.

#### **Learning Objectives:**

1. Demonstrate an ability to use scientific methods and evidence to investigate, evaluate and improve one's own patient care practice; continually strive to integrate best evidence into one's daily practice of medicine.
- B. **GOAL: Habit of Life-long Learning.** Develop knowledge, skills and attitudes needed for life-long learning and self assessment, and recognize key issues about continuing education and recertification process for pediatricians.

#### **Learning Objectives:**

1. Demonstrate a habit of critical thinking, evidence-based decision-making and continuous, quality improvement.
2. Describe one's own style of learning, gathering and storing information, decision-making, and translate this understanding into an approach to professional development. Identify resources for up-to-date information related to general pediatrics (e.g., journals, texts, tapes, computer databases, continuing education courses, online resources, etc.) and discuss the specific utility of each for the general pediatrician.
3. Demonstrate the use of information technology to optimize life-long learning (e.g., use PDAs, online information resources, curriculum guides, self-assessment tools and tracking systems).
4. Alter one's practice of medicine over time in response to new discoveries and advances in epidemiology and clinical care.
5. Seek and incorporate feedback and self-assessment into a plan for professional growth and practice improvement (e.g., use evaluations provided by patients, peers, superiors and other medical team members to improve patient care).

### **COMPETENCY 4.**

**Systems-Based Practice:** Understand how to practice quality health care and advocate for patients within the context of the health care system.

**Goals/Competencies the second year residents are expected to obtain:**

- A. **GOAL:** Identify key aspects of health care systems, cost control and mechanisms for

payment in the NICU setting.

**Learning Objectives:**

1. Advocate for patients/families in ones' practice by helping them with system complexities and identifying resources to meet their needs.
2. Work with health care managers and providers to assess, coordinate, and improve patient care, consistently advocating for high. Quality.

**COMPETENCY 5.**

**Professionalism:** Residents must demonstrate a commitment to carrying out professional responsibilities and adherence to ethical principles.

**Goals/Competencies the second year residents are expected to obtain:**

- A. **GOAL:** Cultural, Ethnic, and Community Sensitivity. Understand and appreciate cultural diversity in patients and recognize the health-related implication of cultural and religious beliefs and practices of groups represented in a community.

**Learning Objectives:**

1. Demonstrate the effort to offer and provide language assistance services (including bilingual staff and interpreter services) in a timely manner to each patient and family with limited English proficiency. Demonstrate ease and competence in the use of a trained medical interpreter by telephone and in person.
2. Assist families in accessing religious support systems in the context of their own faith when they are in unfamiliar medical settings.

**COMPETENCY 6.**

**Interpersonal and Communication Skills:** The second year resident must demonstrate interpersonal and communication skills that result in the effective exchange of information and teaming with patients, their families, and professional associate.

**Goals/Competencies the second year residents are expected to obtain:**

- A. **GOAL:** Core Communication Skills. Effectively and empathetically communicate with families.

**Learning Objectives:**

1. Communicate effectively with families to create and sustain a therapeutic relationship across the broad range of socioeconomic and cultural backgrounds.
2. Share information with the family in a way that enhances their understanding of the problem and management plan, and include them in decision-making to the extent that they desire.
3. Regard the physician-patient relationship as a partnership, and respect families' participation in decision-making.
4. In explanations, use words that are easy for the family to understand, and avoid medical jargon. Check for mutual understanding of treatment plan, and ask if parent has any questions.
5. Demonstrate an effort to include parent in choices and decisions to the extent they desire.

**B. GOAL: Maintain comprehensive, timely, and legible medical records.**

**Learning Objectives:**

1. Learn to organize documentation in a system based problem oriented manner.
2. Know importance of grammatically accurate documentation.
3. View documentation as a report to anyone assuming care of the patient either inpatient or outpatient with full succinct information concerning the infants medical history.

**Regarding EHR/CPOE**

Master the common knowledge covering planning, implementation, and operation of EHR for knowledge management, quality improvement, patient safety, and care coordination.

Recognize goals of CPOE which are: improved medication safety (reducing adverse drug events); reducing variation in care and improving efficiency in care delivery.

Master entering orders through CPOE for medications, diagnostic studies, imaging studies, therapeutic services, nutrition and food services, nursing services, and other orderables.

**Resident Curriculum  
PL-3  
Teaching**

**Patient Care**

The competency of patient care includes:

- communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families
- gather essential and accurate information about their patients
- make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
- develop and carry out patient management plans counsel and educate patients and their families
- use information technology to support patient care decisions and patient education
- perform competently all medical and invasive procedures considered essential for the area of practice
- provide health care services aimed at preventing health problems or maintaining health
- work with health care professionals, including those from other disciplines, to provide patient- focused care

**Patient Care: Goals and Objectives**

**Goal #1: Understand the principles of basic education and adult learning theory, learn to assess learning needs of the student, understand and implement different learning tools used in medical education and learn to evaluate and give feedback to the adult learner**

**Objectives:**

- a. The resident will demonstrate the ongoing development of the patient care skills initially required while rotating through their core pediatric rotations.
- b. The resident will ensure the student is educated to obtain a detailed pertinent history, review all medical records and perform a complete age appropriate physical exam. They will then guide and educated the student to formulate a differential diagnosis and plan appropriate diagnostic and therapeutic interventions, in coordination with the medical team.
- c. The resident will teach the student to reach appropriate assessments through thoughtful review of diagnostic results and frequent reassessment of the patient, making changes to management as appropriate based on the changing clinical status of the patient and redefined differential diagnosis.
- d. The resident is to teach the student the responsibilities to educate and work with the patient's family and maintain a strong professional therapeutic alliance.
- e. The residents will educate the students to be mindful of routine health care maintenance for infants and children under their care. They will be taught how to order and follow up on these tests ie; Texas Newborn Screen (as well as what is screened for), hearing screens and reporting required to the state. Active and passive immunizations.
- f. Residents will teach appropriate need for frequently done therapeutic and diagnostic procedures in the newborn and pediatric patient and after assisting the student in obtaining informed consent will supervise the student in performing the following procedures after the student has demonstrated educated verbal knowledge of the

appropriate approach to that procedure or technical skill.

- i. Intravenous catheter placement
- ii. Lumbar puncture
- iii. Venipuncture and heel stick for NBS and blood sampling
- iv. Immunizations
- v. IM, SQ and ID injections
  1. IM Vitamin K administration
  2. Immunizations
- vi. Eye prophylaxis
- vii. Gavage or NG placement
- viii. Aerosol treatments

## Medical Knowledge

The competency of Medical Knowledge includes:

- demonstrate an investigatory and analytic thinking approach to clinical situations
- know and apply the basic and clinically supportive sciences which are appropriate to their discipline

## Medical Knowledge: Goals and Objectives

**Goal #1: Understand the principles of basic education and adult learning theory, learn to assess learning needs of the student, understand and implement different learning tools used in medical education and learn to evaluate and give feedback to the adult learner**

### Objectives:

- a. Identify one's own knowledge gaps and role-model self-directed learning
- b. Understand basic education theory
- c. Learn different method of education
  - i. Educational need assessment
  - ii. Effective lecturing
  - iii. Use of visual aids
  - iv. Teaching in small groups:
    1. case based and problem based learning
- d. Learn how to acquire knowledge of the learner, including motivation, interests, and knowledge deficits
- e. Practice using effective questioning to engage and involve learners
- f. Practice applying specific learning to broader clinical problems
- g. Practice teaching general concepts to learners

## Practice- Based Learning and Improvement

The competency of Practice- Based Learning and Improvement includes:

- analyze practice experience and perform practice-based improvement activities using a systematic methodology
- locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems
- obtain and use information about their own population of patients and the larger population from which

their patients are drawn

- apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness
- use information technology to manage information, access on-line medical information; and support their own education
- facilitate the learning of students and other health care professionals

## **Practice- Based Learning and Improvement :Goals and Objectives**

**Goal #1: Understand the principles of basic education and adult learning theory, learn to assess learning needs of the student, understand and implement different learning tools used in medical education and learn to evaluate and give feedback to the adult learner**

### **Objectives:**

- a. Evidenced based learning
  - i. The resident will teach the students to utilize a broad range of published medical information available through web-based resources, as well as print textbooks and the TTUHSC library. It is expected for the students to make decisions about patient care that are informed by review, synthesis and application of studies available in the literature. Work rounds will include discussion of information gathered from the literature by students.
- b. The resident and will be prepared (and expect the student to be prepared) for the established clinical vignettes and predetermined topics to be covered by discussion or lecture format.

## **Systems Based Practice**

The competency of System Based Practice includes:

- understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice
- know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources
- practice cost-effective health care and resource allocation that does not compromise quality of care
- advocate for quality patient care and assist patients in dealing with system complexities
- know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance

## **Systems Based Practice :Goals and Objectives**

**Goal #1: Understand the principles of basic education and adult learning theory, learn to assess learning needs of the student, understand and implement different learning tools used in medical education and learn to evaluate and give feedback to the adult learner**

### **Objectives:**

- a. The resident will discuss with the student the need to provide high quality, but cost-effective health care.

- b. Demonstrate to the student the need for collaboration with case managers, social workers and all other interdisciplinary team members to implement appropriate discharge plans and arrangements for follow-up.
- c. The resident will stress to the student the importance of communicating with the patient's primary care physician when necessary, especially near the time of discharge

## **Professionalism**

The competency of Professionalism includes:

- demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development
- demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices
- demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities

### **Professionalism :Goals and Objectives**

**Goal #1: Understand the principles of basic education and adult learning theory, learn to assess learning needs of the student, understand and implement different learning tools used in medical education and learn to evaluate and give feedback to the adult learner**

**Objectives:**

- a. The resident through their actions will at all times demonstrate the highest ethical and professional behavior.
- b. The resident should stress to the student that patient and family confidentiality is of the highest priority.
- c. The resident will supervise the student in interacting with an ethnically and socio-economically varied patient population. The student must understand that all patients are cared for independent of their ability to pay for services.
- d. The residents will assist and guide the student in providing compassionate, empathetic and culturally sensitive communication with all parents. They will be sensitive to the unique situation of parents of ill newborns. They will be taught to demonstrate sensitivity and responsiveness at all times to parents' culture, gender, sexual orientation and disabilities

### **Interpersonal and Communication Skills**

The competency of interpersonal and communication skills include:

- create and sustain a therapeutic and ethically sound relationship with patients
- use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills
- work effectively with others as a member or leader of a health care team or other professional group

### **Interpersonal and Communication Skills :Goals and Objectives**

**Goal #1: Understand the principles of basic education and adult learning theory, learn to assess learning needs of the student, understand and implement different learning tools used in medical education and learn to evaluate and give feedback to the adult learner**

**Objectives:**

- a. The resident will learn the skills required to give effective constructive feed back
  - i. Describe components of effective feedback

- ii. Practice giving constructive positive and negative feedback
    - iii. Learn how to deal with difficult students
  - b. Specific information will be given to the student in a timely fashion, with the goal of changing observed behavior and guiding future performance.
  - c. The resident will supervise the student in discussing issues with the following;
    - i. Interdisciplinary team members
    - ii. Family members
    - iii. Consultants
  - d. The resident will educate the students in the importance of accurate, complete legible medical records in communicating information among consultants and team members both in cross cover care and when leaving a rotation. A complete off-service medical summary of care should be completed.



**Residents Curriculum**

**PL3**

**Urgent Care**

**Goals:**

1. Ability to perform symptoms-directed history and physical examination of patients upon initial presentation in urgent care settings.
2. Ability to institute appropriate initial management of urgent medical problems.
3. Ability to coordinate in-patient and out-patient care and when necessary, activation of emergency medical service.

**Resident Role & Expectations :**

1. Residents are expected to be present on time for their scheduled shifts from 04.00pm till 10.00pm on weekdays and 10.00am till 04.00pm on Saturdays.
2. Residents are expected to write-up complete and accurate history & physical exams, review old patient records when available, to confirm medication profiles with patients and families.
3. Residents are expected to develop more detailed differential diagnoses and streamlined work-up and treatment plans.
4. Ability to determine indicated additional testing and/or consultation for definitive care of more complex medical problems.
5. Ability to perform routine pediatrics procedures in the UC setting.
6. Residents will be expected to function independently and report directly to the pediatric attending in the UC.

**Educational Goals & Learning Objectives:**

1. Development of improved and more streamlined diagnostic approaches, clinical evaluations, and differential diagnoses of disease and correlation of history and physical exam findings with encountered diseases.
2. Development of knowledge, attitudes, and skills for competent care of pediatrics patients with different socioeconomic statuses, and ethnic backgrounds; including disease prevention, recognition of disease presentation, and promotion of optimal health habits.

3. Acquisition of basic procedural skills such as nebulized treatment etc.

### **Patient Care**

#### **Goal:**

Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to:

#### **Competencies:**

- communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families
- gather essential and accurate information about their patients
- make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
- develop and carry out patient management plans counsel and educate patients and their families
- use information technology to support patient care decisions and patient education
- perform competently all medical and invasive procedures considered essential for the area of practice
- provide health care services aimed at preventing health problems or maintaining health
- work with health care professionals, including those from other disciplines, to provide patient- focused care

### **Patient Care: Goals and Objectives**

#### **Goal #1: Understand the basic principles and utilization of urgent care services for children**

#### **Objectives:**

1. Describe the organization and utilization of **urgent care services** for children in Texas Tech Clinic
2. Demonstrate the ability to activate and use the local EMS for children, including interhospital transport

**Goal #2: Evaluate and manage common signs and symptoms in infants, children, and adolescents that present to the urgent care clinic.**

**Objective:**

1. Evaluate and Stabilize patients with signs and symptoms that present in the UC setting.

- Surgery/trauma: acute abdomen, burns, lacerations, trauma and prompt referral.

**Goal #3: Recognize and stabilize common illnesses and injuries that present emergently.**

**Objectives:**

Evaluate and manage patients with common diagnoses that present in the UC setting.

- AFI, AGE,UTI,URI, Abdominal pain, acute abdomen, DKA, Viral exanthema,
- Dermatology: acute drug reactions,
- Ophthalmologic: corneal abrasion, conjunctivitis, infection,
- Orthopedic: arthritis, common dislocations, discitis, fractures, gait disturbance, overuse syndromes, osteomyelitis, septic arthritis, sprains, strains,
- Otolaryngologic: epistaxis, foreign body aspiration, peritonsillar or retropharyngeal abscess
- Trauma/surgical: burns, closed head injury, dental injuries, soft tissue injury (including lacerations, abrasions and contusions)

**Goal #4: Use common diagnostic tests and imaging studies appropriately in the UC setting.**

**Objectives:**

**#1. Demonstrate understanding of common diagnostic tests and imaging studies used in the UC by being able to:**

- Explain the indications for and limitations of the study.
- Understand the benefits and disadvantages of family presence during procedures.
- Know or be able to locate readily age-appropriate normal values for lab studies.
- 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 the utility of tests in various clinical settings.
- Discuss cost and utilization issues.
- Interpret test results in the context of the care of the specific patient.
- Discuss therapeutic options for correction of abnormalities.

**#2. Use appropriately the following laboratory studies when indicated for patients in the UC setting or order for inpatient admissions.**

1. CBC with differential count, platelets, RBC indices.
2. Bacterial, viral, and fungal cultures and rapid screens Serologic tests for infection (e.g., monospot, VDRL, hepatitis).
3. Blood chemistries: electrolytes, calcium, magnesium, phosphate, and glucose.
5. Renal function tests.
6. Tests of hepatic function and damage.
7. Drug levels and toxic screens.
8. Gram stain.
9. Wet mount.
10. Urinalysis.
11. CSF studies.
12. Stool studies (urine, blood) 15. Other fluid studies (e.g., pleural fluid, joint aspiration fluid)

**#3. Use the following imaging or radiographic studies when indicated for patients in the UC setting or order for inpatient admissions.**

1. Plain radiographs of chest, skull, extremity bones, abdomen, cervical spine,
2. Other imaging techniques, such as CT, MRI, ultrasound, and nuclear scans

**Goal #5: Understand how to use physiologic monitoring and special technology and treatment in the UC setting**

**Objectives:**

**#1. Demonstrate understanding of the monitoring techniques and special treatments commonly used in the UC by being able to:**

1. Discuss indications, contraindications, and complications.
2. Demonstrate proper use of technique or treatment for children of varying ages.
3. Interpret results of monitoring based on method used, age, and clinical situation.

**#2. Use appropriately the monitoring techniques used in the UC:**

1. Physiologic monitoring of temperature, blood pressure, heart rate, respirations.
2. Pulse oximetry.

**#3. Utilize appropriately the treatments and techniques used in the UC:**

1. Universal precautions.
2. Administration of nebulized medication.

3. Injury, wound and burn care.
4. Oxygen delivery systems.

**Goal #6: Demonstrate high standards of professional competence while working with patients in the UC.**

**Objectives:**

- #1. 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.
- #2. Use a logical and appropriate clinical approach to the care of UC patients, applying principles of evidence-based decision-making and problem-solving, and demonstrating the ability to prioritize. Perform accurate UC triage

**Goal #7. : 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.

**Objectives:**

1. Abscess: I & D of superficial abscesses
2. Bladder: catheterization
3. Conjunctival swab
4. Ear: cerumen removal
5. Eye: irrigation
6. Eye: patch
7. Eye: fluorescein eye exam
8. Foreign body removal (simple): nose
9. Foreign body removal (simple): ear
10. Foreign body removal (simple): subcutaneous
11. Immobilization techniques for common fractures & sprains
12. Ingrown toe nail treatment
13. Medication delivery: IM
14. Medication delivery: inhaled
15. Medication delivery: rectal
16. Pulmonary function tests: peak flow meter
17. Reduction of nursemaid elbow
18. Reduction/splinting of simple dislocation

19. Sterile technique
20. Subungual hematoma: drainage
21. Suctioning: nares
22. Suctioning: oral pharynx
23. Throat swab
24. Tooth: temporary reinsertion
25. Urethral swab
26. Venipuncture
27. Anesthesia/analgesia: digital blocks
28. Anesthesia/analgesia: local/topical
29. Wood's lamp examination of skin
30. Wound care and suturing of lacerations (If sutures available)
31. Stapling of laceration when staples available (or derma-bond if available)

**Goal #8: 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

**Objectives:**

1. Monitoring interpretation: pulse oximetry
2. Monitoring interpretation: respiratory
3. Radiologic interpretation: chest X-ray
4. Vision screening

## Medical Knowledge

**Goal:**

Residents must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to patient care.

Residents are expected to:

demonstrate an investigatory and analytic thinking approach to clinical situations

- know and apply the basic and clinically supportive sciences which are appropriate to pediatrics

**Objectives:**

Evaluation and treatment of multiple medical and surgical conditions; including appropriate testing and imaging; laboratory and radiographic interpretation, pharmaceutical management, and sub-specialty consultations where indicated.

Describe common presentation of illnesses, and responses to therapy; including the pharmacokinetics and pharmacodynamics of common medical treatments.

Preventive care, including primary and secondary interventions with special emphasis about iatrogenic complications and prevention.

Evaluate and manage common signs and symptoms in infants, children, and adolescents that present to the urgent care center

**Recognize and stabilize common illnesses and injuries that present urgently/emergently.**

**Use common diagnostic tests and imaging studies appropriately in the UC setting.**

**Understand how to use physiologic monitoring and special technology and treatment in the UC setting**

- Presentations of patients seen, interpretations of laboratory tests and imaging, differential diagnosis, and evidence based evaluation and treatment.

**Objectives:**

**#1. Demonstrate understanding of the monitoring techniques and special treatments commonly used in the UC by being able to:**

1. Discuss indications, contraindications, and complications.
2. Demonstrate proper use of technique or treatment for children of varying ages.
3. Interpret results of monitoring based on method used, age, and clinical situation.

**#2. Use appropriately the monitoring techniques used in the UC:**

1. Physiologic monitoring of temperature, blood pressure, heart rate, respirations.
2. Pulse oximetry.

**#3. Utilize appropriately the treatments and techniques used in the UC:**

1. Universal precautions.

2. Administration of nebulized medication.
3. Injury, wound and burn care.
4. Suturing and topical adhesive.
5. Splinting.
6. Oxygen delivery systems.

### **Practice- Based Learning and Improvement**

#### **Goal:**

Residents must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life long learning.

Residents are expected to develop skills and habits to be able to :

#### **Competencies:**

Identify strengths, deficiencies and limits in one's knowledge and expertise.

- Set learning and improvement goals.
- Identify and perform appropriate learning activities.
- Systematically analyze practice, using quality improvement methods, and implement changes with the goal of practice improvement.
- Incorporate formative evaluation feedback into daily practice.
- Locate, appraise and assimilate evidence from scientific studies related to their patients' health problems.
- Use information technology to optimize learning.
- Participate in the education of patients, families, students, residents and other health professionals, as documented by evaluations of a resident's teaching abilities by faculty and/or learners.

#### **Objectives:**

**Demonstrate high standards of professional competence while working with patients in the urgent care setting.**

#### **Objectives:**

1. 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



2. Use scientific methods and evidence to investigate, evaluate and improve one's patient care practice in the UC

3. Identify personal learning needs, systematically organize relevant information resources for future reference, and plan for continuing acquisition of knowledge and skills

### **Systems Based Practice**

#### **Goal:**

Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

Residents are expected to:

- Work effectively in various health care delivery settings and systems relevant to pediatrics
- Coordinate patient care within the health care system relevant to pediatrics
- Incorporate considerations of cost awareness and risk-benefit analysis in patient care
- Advocate for quality patient care and optimal patient care systems
- Work in interprofessional teams to enhance patient safety and improve patient care quality
- Participate in identifying systems errors and in implementing potential systems solutions

#### **Objectives:**

Describe the organization and utilization of emergency medical systems for children in Tech Tech Clinic, El Paso.

Demonstrate the ability to activate and use the local EMS for children, including interhospital transport

### **Professionalism**

#### **Goal:**

Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents are expected to demonstrate:

**Competencies:**

- Compassion, integrity, and respect for others
- Responsiveness to patient needs that supersedes self-interest
- Respect for patient privacy and autonomy
- Accountability to patients, society, and the profession
- Sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation

**Objectives:**

- Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices
- Respectful to staff and patients family members

**Interpersonal and Communication Skills****Goals:**

Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and teaming with patients, their families, and professional associates.

Residents are expected to:

**Competencies:**

1. Communicate effectively with patients and families across a broad range of socioeconomic and cultural backgrounds.
2. Communicate effectively with physicians, other health professionals, and health related agencies.
3. Work effectively as a member of leader of a health care team or other professional group.
4. Act in a consultative role to other physicians and health professionals.
5. Maintain comprehensive, timely, and legible medical records.

**Objectives:**

Clear communication when writing medical orders and giving verbal orders with attention to language.

Avoidance of medical jargon and utilize clinic interpreter in cases where language or cultural factors may influence patient care.

Create a positive relationship with the patient and family to assure optimal medical care, assuring the emotional and cultural needs and expectations of all patients.

Interdisciplinary and/or multidisciplinary participation services to promote optimal patient care.

To work professionally with nursing and ancillary staff to promote optimal patient care.

### **Teaching Methods**

The faculty member will always be available for clarification of management issues or if concerns.

### **Assessment Method (residents)**

The evaluation method is primarily accomplished electronically.

**Patient Care:** Global assessment by all the different attending pediatricians the residents worked with, and procedures performed will also be evaluated.

**Medical Knowledge** Global assessment by different attending pediatricians the residents worked with.

**Practice-Based Learning & Improvement** will be evaluated by chart audit when available and also by responses to question on evidence based medical practice.

**Interpersonal & Communication Skills** Global assessment by different attending pediatricians the residents worked with and additional information from nursing and ancillary staffs, patients and families.

**Professionalism** Global assessment by different attending pediatricians the residents worked with and additional information from nursing and ancillary staffs, co-residents, patients and families.

**System-Based Practice** will be evaluated by global assessment by different attending pediatricians the residents worked with and chart audit when available.

**Level of Supervision**

Residents will be expected to function independently and report directly to the pediatric attending in the UC.

The faculty member will always be available for clarification of management issues or if concerns.

**Educational Resources**

Educational resources and guidelines are available on line and also through the [TTUHSC.edu /El-Paso/library](http://TTUHSC.edu/El-Paso/library).

