

## PEDIATRIC EMERGENCY MEDICINE ROTATION Third and Fourth Years

### Faculty:

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**Goal:** Develop competency in pediatric emergency medicine with increasing responsibilities as level of training increases.

**Competency Tools:** Multiple choice quiz, a review of a topic or literature and chart review.

### Learning Objectives:

*Fourth and third years of training:*

1. Provide initial evaluation and management of complex and difficult medical problems (respiratory failure, shock, multisystem organ failure, altered level of consciousness, status seizures, etc.)
2. Evaluate efficiently and in a sophisticated manner as well as treat commonly encountered minor encountered minor outpatient medical problems (URI, otitis media, bronchiolitis, viral exanthems and enathems, constipation abdominal pain, diaper dermatitis, asthma, etc.)
3. Develop comfort with alternate approaches to managing surgical and orthopedic problems (complex lacerations, open wounds, major burns, open or complex fractures and/or sprains, complicated hernias, etc.) and provide the initial evaluation of challenging surgical presentations (acute abdomen, bilious vomiting, gynecologic emergencies, urologic emergencies).
4. Manage more than one patient simultaneously and efficiently as well as supervise others.
5. Be able to organize and direct pediatric resuscitation and trauma care.
6. Develop advanced supervisory and educational skills.
7. Become aware EMS resources and limitations (ambulances, Emits, paramedics and helicopters).
8. Appreciate the role that episodic illness, injury, and its care play in the lives of children, their families and society.
9. Facilitate the integration of the child's episodic care into his/her overall healthcare.

### Curriculum Content:

*Fourth and third years of training:*

1. All of the contents of 1<sup>st</sup> year plus:
2. Coroners' exam.
3. EKG Interpretation.

4. Procedural sedation.
5. Flexible and efficient history taking from care givers, children, and adolescents, supervision and demonstration of subtle physical findings on infants, children, and adolescents.
6. Development and psychological factors affecting parent and patient education, injury prevention, and public policy.
7. Communication skills for dealing with difficult parents, frightened children, stressed referring providers, and junior students/residents/peers.
8. Recognition of subtle barriers to continuity care (stress, poverty, cultural differences); use of flexible and creative measures to overcome barriers and support families).
9. Support and assistance for families in seeking continuity care, when to call social worker.
10. Teaching and supervision of pediatric fluid resuscitation and correction of combined fluid/electrolyte and acid/base imbalances.
11. Pediatric pharmacology considerations for weight and dose (antibiotics bronchodilators, analgesics, antipyretics), drug selection and side-effects, drug interactions, pharmacokinetics, documentation of efficacy, toxicity, patient acceptance and cost considerations.
12. Differential diagnosis and alternatives to management of common pediatric outpatient diseases and complaints.
13. Recognition and removal techniques for refractory pediatric foreign bodies (nose, ear, GI tract, respiratory tract, skin, deep tissues, body cavities).
14. Alternatives in evaluation and management of the febrile infant, toddler, and child.
15. Recognition and management of subtle or concealed child abuse, neglect, and sexual abuse.
16. Familiarity with more lethal pediatric toxidromes (e.g., tricyclics, iron aspirin, caustics, drugs of abuse).
17. Acute management of severe childhood asthma and respiratory failure.
18. Acute management of complicated diabetic ketoacidosis, insulin shock, and hypoglycemia in children.
19. Diagnosis and treatment of less common childhood life threatening infections (myocarditis, encephalitis, epiglottitis).
20. Increase skill and comfort in organizing and directing a team in pediatric resuscitation.
21. Minor childhood trauma: extremity/trunk lacerations including vascular, nerve, and tendon injury assessment; facial lacerations; open and comminuted fractures and sprains, xray interpretation, diagnosis, terminology, immobilization, triage of orthopedic injuries.
22. Diagnosis and management of severe pediatric infections such as pyelonephritis, tracheitis, pneumonia, septic arthritis, including triage to intensive care and alternatives to hospitalization.
23. Diagnosis and treatment of headaches involving neurologic deficits and of complex, status or subtle seizures, approach to a patient with altered mental status.
24. Diagnosis, differential diagnosis and triage/referral of nonspecific surgical symptoms.

25. Alternatives, cautions, and hazards associated with conscious sedation.

### **Skills Acquisition:**

#### *Fourth and third years of training:*

Ensure opportunities for the performance of the above as well as following diagnostic and therapeutic procedures:

1. Radiologic interpretation including normal variants and subtle abnormalities.
2. More complex upper and lower extremity splints, special immobilization devices.
3. Local anesthesia and digital anesthesia including proximal blocks
4. Layered wound repair, facial closures and dressing application.
5. Procedural sedation
6. I & D abscess – complex

### **Reading Materials:**

1. General pediatric emergency medicine texts.
2. Articles from faculty and fellow residents.
3. PEM curricular units

### **Rotation Requirements:**

Residents will work 16-17 shifts per month. Shifts are 8 -12 hours in length

1. Residents will have their regular continuity clinics during PER rotations, and there will be no other clinical assignments on those days.
2. Interns will be given some autonomy as skills are developed in the care of mildly to moderately ill and injured children. It is expected that interns will present all patients to the attending in the PER. Attendings will see all interns' patients.
3. Upper level residents will be primarily responsible for the care of all degrees of illness and injury to chlordane. It is expected that upper levels will discuss difficult or interesting cases with the attending, but it is expected that most outpatient problems will be managed with peripheral or minimal supervision.
4. The intern will assist in the care of severely ill and injured patients under direct supervision.
6. Severely ill and injured children will be managed by upper level residents with an overview by the attending. As the resident gains comfort with these patients, team leadership and management will be provided by the senior residents who will report to the attending.
7. The intern will be supervised while learning minor skills such as local anesthesia, minor laceration repair, splinting and lumbar puncture.
8. Upper level residents will be responsible for seeking consultation with the attending as needed.
9. Residents will contact referring physicians about the children referred and/or admitted.

