SAR2 (PG4) Training Objectives
Pediatric Surgery

Description of the Rotation:
On the Pediatric Surgery rotation the senior resident provides primary responsibility for all patients on the pediatric general surgery service. Working with four board-certified pediatric surgeons, the PG4 performs evaluation and management of patients in the outpatient, emergency room, and inpatient settings. Daily activities include walk rounds with the on-service pediatric surgeon, operative coverage (four days) and clinic (one day). This includes all weekday level one and two pediatric trauma resuscitations. The PG4 leads a team inclusive of a PG2 and medical students. On the weekend the PG4 and PG2 alternate weekends rounding on the service so as to ensure adequate time away in accordance with program policy. Call is from home during the week for service patients (PG4 covers ICU pts, PG2 ward patients). Urgent matters that cannot be attended to in a timely manner by the Pediatric PG4 are covered by the inhouse trauma PG4 nightfloat. The pediatric PG4 takes in-house call one to two days per month as the trauma chief which cross covers the pediatric surgery service. In addition to the listed conferences below, the PG4 has one required scheduled day in the SEAL (see the SEAL schedule for details). Coverage during the SEAL experience must be arranged with the administrative chief.

Suggested Reading: In addition to sections from the major surgical textbooks relating to your individual patients, you should inquire of the pediatric surgery faculty (at the beginning of the rotation) as to special contemporary articles and or texts that he would consider relevant.

General Schedule of Activities: (pm walk rounds each day with individual attendings)
Monday:
   OR
Tuesday:
   OR

Wednesday:
   Surgical Case Conference: 7:00am
   Surgical Grand Rounds:  7:45am
   OR, Clinic 8:30am-1pm (variable)
Thursday
   Thursday Resident Didactic Conference
   OR
Friday:
   OR, Clinic 8:30am-1pm
   Pediatric D&C (1st, 2nd, 4th Fridays of the month)
   Pediatric Trauma Conference (3rd Friday of the month)
Sat/Sun: Weekend rounding alternating with the pediatric PG2 to allow for at least every other weekend off.
Call from home weekdays, 1-2 days of in-house call per month on weekends as Trauma chief

Goals and Objectives

Patient Care
*The PG4 on the Pediatric Surgery Service should demonstrate the ability to:*

- Supervise all aspects of the care of the pediatric surgery patients.
• Formulate the diagnostic and therapeutic plan for infants and children having any of the common pediatric surgical diseases, including inguinal hernias, pyloric stenosis, congenital abdominal wall defects, congenital lung abnormalities, chest wall abnormalities, necrotizing enterocolitis, tracheo-esophageal anomalies, and congenital anomalies of the head and neck, as well as anorectal anomalies and Hirschsprung’s Disease.

• Understand the operative steps for the following procedures commonly performed on the service:
  o Appendectomy (laparoscopic and open)
  o Inguinal hernia repair
  o Central venous access
  o Cholecystectomy
  o Pyloromyotomy
  o Congenital abdominal wall defect closure
  o Rigid bronchoscopy and esophagoscopy for the removal of bronchial or esophageal foreign bodies.
  o Open or laparoscopic Nissen fundoplication with or without gastrostomy feeding tube.
  o Laparotomy for necrotizing enterocolitis
  o ECMO cannulation in infants requiring cardiopulmonary support
  o Familiarity with less common surgical procedures that may be encountered
    ▪ Wilms tumor resection
    ▪ Neuroblastoma resection
    ▪ CDH repair
    ▪ TE fistula repairs
    ▪ Imperforate anus
    ▪ Hirschsprung (including biopsy and definitive repair)
  o Pediatric trauma resuscitation

Medical knowledge

The PG4 on the Pediatric Surgery Service should understand:

• Common presenting signs and symptoms, evaluation of, and management of the following:
  o Airway obstruction in the pediatric population (foreign body)
  o Head and neck lesions (branchial cleft, remnants, thyroglossal duct remnants, hemangiomas, cystic hygroma)
  o Chest wall deformities (pectus excavatum and carinatum)
  o Tumors of the lung and mediastinum (pulmonary sequestration, cystic adenomatoid malformations, cysts, teratomas, bronchial adenomas, thymomas, neurogenic tumors
  o Congenital abnormalities of the trachea/esophageus (TE fistula, esophageal atresia, T and E stenoses.
  o Congenital abnormalities of the diaphragm (CDH, eventration, hernias)
  o Congenital abnormalities of the abdominal wall (gastroschisis, omphalocele, umbilical hernia, inguinal hernia, hydrocele)
  o Neonatal intestinal obstruction (intestinal atresia/stenoses, duodenal stenoses, imperforate anus)
  o Necrotizing enterocolitis
  o Meconium ileus
  o Intestinal malrotation
- Pyloric stenosis
- Intussusception
- Appendicitis
- Biliary disorders (biliary atresia, choledochal cyst, cholecystitis)
- Hirschsprung
- Childhood tumors (hepatoblastoma, neuroblastoma, Wilms tumor, rhabdomyosarcoma, teratoma)
- Evaluation of the acute abdomen by age
- Blunt and penetrating trauma in the pediatric patient

- Physiologic differences from the adult population
- Resuscitation in the pediatric patient (burns, sepsis, hemorrhagic shock)

**Practice Based Learning and Improvement**

*The PG4 on the Pediatric Surgery Service should demonstrate the ability to:*

- Critically evaluate published literature regarding the diseases managed on pediatric surgery service, and formulate evidenced-based therapeutic plan.
- Analyze the surgical complications on the service, and present them at the Pediatric D&C in a constructive and educational manner.
- Prepare in advance for clinical activities and didactic conferences with an emphasis on punctual and regular attendance.
- Take considerable initiative in facilitating the learning of junior house staff and medical students.

**Interpersonal and Communications Skill**

*The PG4 on the Pediatric Surgery Service should demonstrate the ability to:*

- Effectively interact with the faculty in formulating and instituting therapeutic plans.
- Communicate abbreviated yet thorough patient discussions with consulting physicians.
- Effectively counsel the patients and their families, including discussions of complex pediatric surgical procedures and disorders.

**Professionalism**

*The PG4 on the Pediatric Surgery Service should:*

- Demonstrate commitment to their patients superseding personal self-interests, including readiness to provide bedside and operative care to the patients irrespective of time of day.
- Demonstrate sensitivity to age, gender, and culture of patients and their families and other health care professionals.
- Carry out administrative responsibilities (operative dictations, call schedule creation, etc.) in a time-sensitive manner.
- Abide by duty hour and other regulatory guidelines.
- Ensure that junior members of the pediatric surgical service abide by duty hour and other regulatory guidelines.

**Systems Based Practice.**

*The PG4 on the Pediatric Surgery Service should:*

- Demonstrate the ability to efficiently and effectively organize the care of the surgical patient in a cost-effective and evidenced-based manner.
- Appropriately recruit other specialists and health care professionals to optimize the efficiency of care of the pediatric patient.