# Pediatric Surgery Goals and Objectives

## Patient Care

### PGY-1 and PGY-2

- Demonstrates caring and respectful behaviors when interacting with patients and/or their families.
- Incorporates the patient and family preferences in making decisions about diagnostic and therapeutic interventions.
- Gathers essential and accurate information about patients.
- Evaluates patients with complex surgical indications and presents a differential diagnosis.
- Compare laparoscopic versus open procedures for each case with attending.
- Makes informed decisions about diagnostic and therapeutic interventions based on patient and family information and preferences, up-to-date scientific evidence, and clinical judgment.
- Discuss diagnosis, therapeutic intervention and/or surgical procedure with attending.
- Demonstrate knowledge of the indications and contraindications for various medications used in the preparation and performance of procedures.

## Manual Dexterity & Technical Skills

- Demonstrates manual dexterity appropriate for PGY-1 and/or PGY-2
- Demonstrates knowledge, psychomotor skills and judgment related to his/her role in the performance of operative surgical procedures.
- Arrives in the OR prepared for the cognitive components of his/her role in individual operative surgical procedures.
- Demonstrates the ability to proceed through various steps of operative procedures in a manner that is consistent with the flow of the operation.
- Demonstrates the ability to make appropriate and timely decisions with respect to the operative procedure.
- Demonstrate competence in the most surgical cases
- Demonstrates an understanding of the benefits and limitations of operative surgical techniques.
- Assist attending staff with surgical procedures.

## Care Plans

- Develops, and discuss patient management plans with upper level resident and/or attending

## Effective Treatment & Health Promotion

- Performs competently all essential medical and invasive procedures.
- Provides health care services aimed at preventing health problems and maintaining health.
- Works with health care professionals, including those from other disciplines, to provide Patient-focused care

## PGY-4

- Demonstrates caring and respectful behaviors when interacting with patients and/or their families.
- Incorporates the patient and family preferences in making decisions about diagnostic and therapeutic interventions.
- Gathers essential and accurate information about patients.
- Evaluates patients with complex surgical indications and presents a differential diagnosis.
- Compare laparoscopic versus open procedures for each case.
- Makes informed decisions about diagnostic and therapeutic interventions based on patient and family information and preferences, up-to-date scientific evidence, and clinical judgment.
- Demonstrate knowledge of the indications and contraindications for various medications used in the preparation and performance of procedures.

## Manual Dexterity & Technical Skills

- Demonstrates manual dexterity appropriate for PGY-4
### Pediatric Surgery Goals and Objectives

- Demonstrates knowledge, psychomotor skills and judgment related to his/her role in the performance of operative surgical procedures.
- Arrives in the OR prepared for the cognitive components of his/her role in individual operative surgical procedures.
- Demonstrates the ability to proceed through various steps of operative procedures in a manner that is consistent with the flow of the operation.
- Demonstrates the ability to make appropriate and timely decisions with respect to the operative procedure.
- Demonstrate competence in the most complex surgical cases
- Demonstrates an understanding of the benefits and limitations of operative surgical techniques.
- Assist attending staff with complex surgical procedures.

### Care Plans
- Develops, and executes patient care plans appropriate for PGY-4
- Coordinate the overall care of patients for the team of residents and students

### Effective Treatment & Health Promotion
- Performs competently all essential medical and invasive procedures.
- Provides health care services aimed at preventing health problems and maintaining health.
- Works with health care professionals, including those from other disciplines, to provide Patient-focused care

### Medical Knowledge

#### PGY-1 and PGY-2
- Understanding of surgical pathophysiology and critical care, pharmacology, physiology, and interpretation of hemodynamic data.
- Demonstrate ability to formulate a diagnostic and treatment plan for pediatric diseases that are amenable to surgical intervention.
- Demonstrate familiarity with surgical literature and extensive areas of basic surgical disease in pediatric surgery.
- Must relate basic medical knowledge to patient care. Residents must critically evaluate and demonstrate knowledge of pertinent scientific information.
- Demonstrate surgical competence by the use of significant surgical knowledge and skill to achieve a performance that produces appropriate and anticipated outcomes.
- Demonstrate the capacity to integrate surgical continuity of care principles into the total care plan for all pediatric surgical patients.
- Through leadership and teaching, demonstrate understanding of the significance of the natural history of surgical disease, the consequence of surgical care (both positive and negative), and the influence of continuity of care upon surgical outcomes.
- Exhibit the capability to integrate surgical continuity of care principles into the total care plan for all pediatric surgical patients.
- Incorporate the knowledge of ethical, legal, economic, and/or social factors into the activities of the entire surgical team for all components of surgical care.
- Demonstrate knowledge of embryology, anatomy and physiology of common neonatal surgical diseases.

#### PGY-4
- Mastery of surgical patho-physiology and critical care, pharmacology, physiology, and interpretation of hemodynamic data.
- Demonstrate ability to formulate and implement a diagnostic and treatment plan for pediatric diseases that are amenable to surgical intervention.
**Pediatric Surgery Goals and Objectives**

- Demonstrate familiarity with surgical literature and extensive areas of basic surgical disease in pediatric surgery.
- Must relate basic medical knowledge to patient care. Residents must critically evaluate and demonstrate knowledge of pertinent scientific information.
- Analyze and present complications at weekly Death and Complication Conference
- Exhibit knowledge base sufficient to teach junior level residents and students on the service.
- Demonstrate surgical competence by the use of significant surgical knowledge and advanced skill to achieve a performance that produces appropriate and anticipated outcomes.
- Demonstrate the capacity to integrate surgical continuity of care principles into the total care plan for all pediatric surgical patients.
- Through leadership and teaching, demonstrate understanding of the significance of the natural history of surgical disease, the consequence of surgical care (both positive and negative), and the influence of continuity of care upon surgical outcomes.
- Exhibit the capability to integrate surgical continuity of care principles into the total care plan for all pediatric surgical patients.
- Incorporate the knowledge of ethical, legal, economic, and/or social factors into the activities of the entire surgical team for all components of surgical care.
- Diagnose common neonatal problems and describe surgical procedures for their correction.

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### Practice-Based Learning & Improvement

**PGY-1, PGY-2, and PGY-4**

**Investigates and Evaluated Patient Care Practices**
- Analyzes practice experience using a systematic methodology.
- Obtains and uses information about their population of patients and the larger population from which patients are drawn.

**Appraises and Assimilates Scientific Evidence Relevant to Patient Care**
- Locates, appraises, and assimilates evidence from scientific studies related to their Patients’ health problems.
- Applies knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness.
- Performs practice-based improvement activities using a systematic methodology.
- Uses information technology to manage information, access on-line medical information; and support his/her own education.
- Exhibit and recognize the importance of lifelong learning in surgical practice.

**Improves Patient Care Practices**
- Demonstrates the ability to analyze personal practice outcomes to improve patient care.
- Performs practice-based improvement activities using a systematic methodology.
- Uses information technology to manage information, access on-line medical information; and support his/her own education.

Facilitates the learning of junior level residents.
### Interpersonal Communication Skills

**PGY-1 and PGY-2**

- Demonstrates skill and sensitivity for appropriate counseling and educating patients and their families in a variety of clinical situations.
- Creates and sustains therapeutic and ethically sound relationships with patients and families.
- Works effectively with others as a leader of the health care team and/or other professional groups.
- Effectively and promptly documents practice activities.
- Presents all patients and conference material in a concise, organized, chronologic, logical and knowledgeable manner.
- Utilizes input from all collaborative interactions with all personnel contributing to the surgical patient care.

**PGY-4**

- Exhibits surgical team leadership.
- Contribute via effective teaching and example to the educational efforts of the surgical residency.
- Evaluates the performance and competence of all members of the surgical residency team.
- Demonstrates skill and sensitivity for appropriate counseling and educating patients and their families in a variety of clinical situations.
- Creates and sustains therapeutic and ethically sound relationships with patients and families.
- Works effectively with others as a leader of the health care team and/or other professional groups.
- Effectively and promptly documents practice activities.
- Presents all patients and conference material in a concise, organized, chronologic, logical and knowledgeable manner.
- Utilizes input from all collaborative interactions with all personnel contributing to the surgical patient care.

### Professionalism

**PGY-1 and PGY-2**

- Demonstrate the ability to win the respect and trust of concerned patients and their families.
- Exhibit dedication to continuity of care of pediatric surgery patients, without regard to time of day.

**PGY-4**

- Exhibit considerable sensitivity and responsiveness to families and their support system.
- Demonstrate the ability to relate to concerned patients and effectively interact with families of concerned patients.
- Exhibit dedication to continuity of care of pediatric surgery patients, without regard to time of day.
# Pediatric Surgery Goals and Objectives

## System-Based Practice

### PGY-1 and PGY-2

**Awareness and Responsiveness to the Health Care System:**
- Understands how patient care and other professional practices affect other health care professionals, the health care organization, and the larger society. Understand how these elements of the system affect their own practice.
- Knows how types of medical practice and delivery systems differ from one another, including methods and controlling health care costs and allocating resources.

**Utilization of System Resources:**
- Practices cost-effective health care and resource allocation that does not compromise quality of care.
- Advocates for quality patient care and assist patients and their families in dealing with system complexities.

Partner with health care managers and health care provides to assess, coordinate, and improve health care and understands how these activities can affect system performance.

### PGY-4

**Awareness and Responsiveness to the Health Care System:**
- Understands how patient care and other professional practices affect other health care professionals, the health care organization, and the larger society. Understand how these elements of the system affect their own practice.
- Knows how types of medical practice and delivery systems differ from one another, including methods and controlling health care costs and allocating resources.

**Utilization of System Resources:**
- Practices cost-effective health care and resource allocation that does not compromise quality of care.
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Partner with health care managers and health care provides to assess, coordinate, and improve health care and understands how these activities can affect system performance.
# Pediatric Surgery Goals and Objectives

## Pediatric Surgery Procedure Benchmarks

### PGY-1 and PGY-2

**Participate in the management of simple surgical problems in the pediatric population such as:**

1. Integument
2. Craniocervical
3. Thoracic
4. Cardiovascular
5. Gastrointestinal
6. Oncologic
7. Genitourinary
8. Musculoskeletal

Develop a working relationship with members of the pediatric intensive care unit in managing postoperative pediatric patients.

The PGY-2 resident should begin to develop some fundamental minimally invasive skills in some of the larger children through practice and simulators/trainers and working with the attendings on various cases to include: appendectomies, cholecystectomies, and VATS procedures.

### PGY-4

**Participate in preoperative, operative and postoperative care of more complex problems in pediatric surgery such as:**

1. Integument
2. Craniocervical
3. Thoracic
4. Cardiovascular
5. Gastrointestinal
6. Oncologic
7. Genitourinary
8. Musculoskeletal

The resident should develop some fundamental minimally invasive skills in children of all sizes through practice with simulators/trainers and working with the attendings on various cases to include:

- Appendectomies
- Nissen fundoplication
- Cholecystectomies
- VATS procedures
- Reduction of intussusception
- Pyloromyotomies
- Splenectomies.

The resident will have exposure to robotic assisted surgery and should develop a basic understanding of the system and be able to assist with cases.
The pediatric surgery service requires that all residents refer to Access Surgery [http://www.accesssurgery.com](http://www.accesssurgery.com) for the required chapter readings and videos that must be reviewed while on the rotation.

**Current Surgical Diagnosis and Treatment** > Chapter 45. Pediatric Surgery

*This activity is optional | Make Required*

- **Schwartz’s Principles of Surgery** > Chapter 38. Pediatric Surgery
  
  *This activity is optional | Make Required*

**VIDEO ACTIVITIES**

- **Gastroschisis**
  
  *This activity is required | Make Optional*

- **Pediatric Inguinal Herniorrhaphy**
  
  *This activity is required | Make Optional*

- **Pediatric Thyroglossal Duct Cyst Excision (Sistrunk Procedure)**
  
  *This activity is required | Make Optional*

**BOARD REVIEW TESTS**

- **Pediatric Surgery I**
  
  (38 questions, 75% passing grade)

  *This activity is required | Make Optional*

- **Pediatric Surgery II**
  
  (38 questions, 75% passing grade)

  *This activity is required*

**Required Readings:**

- Essentials of Pediatric Surgery – Rowe, Coran
- Pediatric Surgery (2 volumes) – O’Neill, Rowe, Grosfeld, Fonkalsrud, Coran 6 Revised June 2005
- Journal of Pediatric Surgery