

PEDIATRIC ORTHOPEDICS

ROTATION SPECIFIC GUIDELINES

In keeping with the specific standards of accreditation (2009) this rotation assumes administrative support and university affiliation.

Junior:

1. Become proficient in the closed management of fractures in the ER. Be able to splint and do circumferential casting for both upper and lower extremity fractures
2. Understand the approach to a pediatric trauma patient and triage the injuries appropriately
3. Become proficient in the neonatal exam. Being able to assess the patient for common foot abnormalities, hip dysplasia and spine abnormalities.
4. In orthopedic pediatric clinics the resident should understand common limb alignment disorders and be able to order appropriate investigations
5. Be exposed to the clinical and radiologic assessment of all types of pediatric scoliosis (Understand what the Cobb angle is and how to measure it)
6. Understand the clinical and radiologic assessment of pediatric hip abnormalities. (Perthes, SCFE and DDH)
7. Become proficient in the use of a scanogram
8. Be exposed to congenital disorders and syndromes

Senior:

1. Become proficient in managing pediatric trauma and preparing an operative plan for growth plate injuries, open fractures and traumas
2. Assist the TTL in the appropriate triaging of pediatric trauma injuries
3. Assess and treat neonatal patients for DDH, clubfeet, congenital scoliosis, and neonatal bone infections (Should be able to apply a Pavlik harness, initiate Ponsetti casting and order appropriate investigations)
4. Identify limb alignment disorders and investigate and plan reconstructive surgery if required
5. Assess and understand the treatment options of all types of pediatric scoliosis
6. Become proficient in pediatric hip disorders and their operative management. (Perform closed reductions and arthrograms on DDH, pin SCFE and assist in reconstructive hip procedures for CP and Perthes. VDRO and girdlestone)
7. Understand the use of scanograms for limb length abnormalities and plan appropriate surgical interventions (epiphysiodesis, stapling and lengthening)
8. Understand and begin a study sheet of congenital and syndrome abnormalities and their associated orthopedic abnormalities

Following the Goals and Objective is an outline of teaching available/caseload in those areas for the junior and senior resident.

The resident, upon orientation will review the Resident specific and College specific goals with his/ her preceptor to ensure adequate focus throughout the rotation.

I. MEDICAL EXPERT

Junior/Senior

Upon completion of the pediatrics rotation the resident will be able to;

- Demonstrate appropriate core knowledge based on their level of training
- Understand the spectrum of the pediatric orthopedic practice
- Appreciate the structure of health care in the setting including
 - Access to tertiary care, stabilization and investigation of patients for transfer
 - Resource allocation and health care infrastructure
 - Practice Management – Group and Solo
 - Life Balance

TECHNICAL KNOWLEDGE

Junior

The junior resident will be expected to;

- Be exposed to pediatric elbow trauma and be able to make the diagnosis and triage appropriately. (Lateral condyle fractures, medial epicondyle fractures and supracondylar fractures)
- Become proficient in driving K-wires for fracture fixation in both the upper and lower extremity.
- Understand the technique for flexible nailing of long bone fractures.
- Assist in the exposure and closure of all pediatric cases
- Assist with spinal cases and become proficient in handling orthopedic instruments

Senior

The medical expert role will be based on the volumes of clinical cases. There is always a concern amongst residents that they will be unable to get the expert knowledge which they require through a pediatric orthopedic rotation. This could perhaps be addressed with a pre-rotation discussion of the individual residents learning objectives and to guide him/her in how this expert knowledge is attained whilst in a pediatric orthopedic rotation, e.g. personal learning projects, online assessment tools/examinations.

- Be proficient in pediatric elbow trauma and be able to use both open and closed surgical techniques.(Lateral condyle fractures, medial epicondyle fractures and supracondylar fractures)
- Become proficient in open treatment for fracture fixation in both the upper and lower extremity.

- Be proficient in flexible nailing of long bone fractures.
- Perform the exposure and closure of all pediatric cases
- Assist with spinal cases and become proficient in placing hooks and assisting with pedicle screws

II COMMUNICATOR

The resident will be expected to establish and maintain therapeutic relationships with both patients and their families. Communication will be assessed in both written and verbal areas.

Areas of evaluation include;

1. The ability to take a focused history (observed H&P)
2. listening skills
3. information delivery to patients/family, e.g. informed consents
4. Information delivery to colleagues, progress notes, orders etc. (random assessment of documentation)

The pediatric rotation will emphasize a patient centered approach in which the resident will be allowed to develop competency in learning to modify and explain information in a way that meets the needs of the individual patient. This includes using pediatric specific and safe language to be able to describe management to both the pediatric patients and their parents/guardians. For assessment purposes the preceptor may require an arena of predetermined specific learning cases e.g. end of life discussion in hip fracture, changing level of care in the ICU patient, or dealing with a physician as patient for example.

Junior

- effective listening to patients and families
- appropriate respect for patient confidentiality and privacy
- accurate documentation of patient encounters

Senior

- effective delivery of information to patients to allow / encourage discussion and informed decision making.
- Deal with challenging communication issues/ e.g. angry family, miscommunication, poor prognosis etc.

III COLLABORATOR

The resident will be required to demonstrate an ability to interact with all other health care professionals including family, nursing and other physicians. Respect for the roles of other professionals will be an important component of this area.

This area will be assessed through:

1. feedback from nursing staff

2. information from other multidisciplinary team members
3. Other physician input.

Assessment of the resident in this area may be best objectified through specific minor projects.
e.g.

1. collaborate with physio to design a post op protocol
2. collaborate with nursing regarding a patient safety issue
3. design a common wait list strategy for partners in a community setting

IV LEADER

The expectation of the resident is to utilize resources to balance patient care and to allocate finite resources wisely. The resident will also be assessed in the ability to balance personal and professional activities and use their time to optimize patient care and CME.

Office administration, practice management and billing will be reviewed.

Assessment

1. Ability to utilize resources wisely
2. Ability to time manage time correctly; promptness, prioritizing etc.
3. Administrative ability

The pediatric orthopedic rotation provides an excellent arena to teach and discuss practice management along with other managerial skills. Topics for review in this arena include;

1. Negotiation skills
2. Committee responsibilities e.g. role of the chair, Roberts rules, perhaps have the resident attend a meeting and discuss the interactions
3. How to get and give references
4. Practice efficiency; Hospital, house and office
5. Managing length of stay and waitlist.

V SCHOLAR

The resident will demonstrate the abilities to ASSESS, APPRAISE, ACQUIRE and CONTRIBUTE to lifelong learning. Scholarship relates to the self-discipline of evaluating, reporting and incorporating new evidence into practice.

This will be assessed through.

1. The ability of the resident to incorporate self directed as well as preceptor directed specific learning goals throughout the rotation.
2. The ability of the resident to teach other health professionals in order to enhance patient care.
3. The resident's ability to integrate new research into practices.
4. The residents' ability to critically appraise their knowledge base, and procedural techniques.

Evaluating of this area is once again difficult. The resident perhaps could be required to search out an evidence based change which could be incorporated into the practice where he/ she is located.

VI HEALTH ADVOCATE

The resident is expected to consistently advocate for the health and care of the patient. This includes an ability to identify the important determinants of health care for the patient, both orthopedic and non-orthopedic. The resident should develop an understanding for the role of the surgeon in the health care system. This includes the role of the physician in recognizing and describing the health needs of the population.

This will be assessed through:

1. the resident interaction with the patient requiring concurrent care issues
2. The residents ability to negotiate for limited resources in patient prioritizing

It is imperative that the resident understands the need for advocacy of the patient as a group as well as an individual. Individual advocacy is usually well established in the early medical career but group advocacy integrates much later in practice.

In this arena evaluation is difficult; perhaps exposure to such areas as, speaking to the hospital foundation, administration, or the media could be covered.

VII PROFESSIONAL

The resident will be expected in this rotation to adhere to a high standard of honesty, integrity, commitment, compassion, effectiveness, competence and altruism.

Other areas of professional behavior to be assessed are manners, presentation skills, personal appearance, utilization of feedback and other evaluation tools.

Self-regulation in these areas is imperative. The resident will be expected to be accountable for all behaviors and recognize the boundaries between professional and personal realms.

Professionalism also includes self- directed learning and evaluation.

This may be assessed through:

1. personal learning projects
2. creation of learning objective for the rotation
3. self-assessment skills and simulation.

Reviewed and approved by the RPC
January 18, 2022

PEDIATRIC ORTHOPEDICS APPENDIX 1

RESIDENT PEDIATRIC ORTHOPEDICS ROTATION

NAME _____
PGY LEVEL _____
SUPERVISOR _____

Rotation Goals and Objectives
See attached

___ Reviewed by resident

SPECIFIC GOALS / Resident discussion

___ Reviewed by resident

Expected responsibilities

- Call
- OR Coverage
- Clinic Coverage

Mid Rotation Evaluation;

Final Evaluation

BEGINNING OF ROTATION

END OF ROTATION

Signature (Resident)

Signature (Resident)

Signature (Attending)

Signature (Attending)

Signature (CTU)

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