PGY1 Pediatric Rotation: Pediatric Cardiology
Riley Hospital for Children
Indiana University Health

Preceptor
Christopher A. Thomas, Pharm.D.
Office: 948-8377/Pager: 312-6319
Cell: 716-3079/CV Surgery Nurse Practitioner Pager: 312-6022

Experience Description

The pediatric cardiology rotation at Riley is designed to give residents an introduction into pediatric cardiac critical care and pediatric cardiology. The rotation will focus on patient specific monitoring and how it relates to the application of pharmacologic therapy in critically ill patients. The resident will focus on collecting and analyzing patient information, the design, implementation and evaluation of evidence based monitoring plans, the redesign of regimens and monitoring plans as needed, documentation of direct patient care activities, problem identification and problem solving, medication reconciliation and discharge counseling. Residents will be required to attend patient care rounds and will be responsible for monitoring the diagnostic, medical, and preventative care for assigned patients. There will be a primary focus placed on practicing evidence-based medicine.

Requirements of Learning Experience

Required Pre-Rotation Activities

- It is expected that the resident will send an email 1 week before starting the rotation to the respective preceptor. The email should include, but is not limited to, the following:
  - Calendar outlining out-of-rotation responsibilities
    - Dates and times of required longitudinal commitments, Indiana Pharmacy Teaching Certificate seminars (if applicable), Residency Forum (if applicable), and any other required residency activity that will occur that month.
    - Dates and times of any mandatory activities (i.e., Pharmacy Grand Rounds, Rx Report, etc.) and other meetings as they are scheduled.
    - Paid time off approved by both the RPD and respective preceptor.
  - Description of clinical strengths/weaknesses and areas the resident wishes to improve upon during the rotation.

Required Attendance

- The resident will attend daily rounds at 8:30am with the pediatric CV surgery team (and the pediatric cardiology team - as assigned) and will be available to all service areas until all pharmacy related issues and topic discussions are addressed and resolved.
- The resident shall pre-round prior to rounds and review proposed interventions with the preceptor before 8:15am (or earlier if necessary in order to arrive at rounds by 8:30am).
- Absences must be approved prior to beginning the rotation via the email mentioned above.
**Required Meetings**
- Resident will attend cardiac critical care journal club (2nd Tuesday of each month at 5pm), pediatric pharmacy journal club (2nd Wednesday of each month at 1pm), grand rounds, pharmacy grand rounds (3rd Tuesday of each month at 12pm), noon conference (if applicable), Rx Report (last Wednesday of the month at 12pm), and care conferences.
- All other meetings as assigned.

**Required Projects**
- Quality improvement projects which are feasible to complete during the rotation month as assigned by the preceptor.

**Required Presentations**
- Present at minimum one journal club to preceptors and other trainees OR to pediatric CV surgery staff.
- Present at minimum one medication in-service (5-10 min. maximum) to pediatric CV surgery staff and decentralized pharmacists AND/OR to inpatient staff pharmacists.

**Required Readings/Topic Discussions**
- The resident will prepare for the meeting to sufficient depth of knowledge to be able to lead the discussion of the topic. Topics include but are not limited to: Congenital heart diseases (anatomy, surgical interventions, pre/post-operative care), congestive heart failure, arrhythmias, cardiomyopathy, endocarditis, myocarditis, anticoagulation, hypertension, pulmonary hypertension, hyperlipidemia, pain/sedation/neuromuscular blockade, fluids, electrolytes, and nutrition, stress ulcer/VTE prophylaxis, cardiopulmonary resuscitation, extracorporeal membrane oxygenation, cardiogenic shock, developmental pharmacology, etc.

**Learning Experience Evaluated Goals**

**Goal R2.4:** Collect and analyze patient information.
**Goal R2.7:** Design evidence-based monitoring plans.
**Goal R2.9:** Implement regimens and monitoring plans.
**Goal R2.10:** Evaluate patients’ progress and redesign regimens and monitoring plans.
**Goal R2.12:** Document direct patient care activities appropriately.

**Learning Experience Activities and Corresponding Learning Experience Goals/Objectives**

<table>
<thead>
<tr>
<th>Learning Experience Activity</th>
<th>Learning Experience Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collect, analyze, and prioritize all drug- and disease-related problems. List appropriate</td>
<td>R2.4.1, 2.4.2, 2.4.3; R2.7.1; R2.12.1, 2.12.2, 2.12.3</td>
</tr>
<tr>
<td>goals for the resolution of the identified problems. Document direct patient care activities</td>
<td></td>
</tr>
<tr>
<td>appropriately.</td>
<td></td>
</tr>
</tbody>
</table>
Devise a rational pharmacotherapeutic approach to the identified problems, anticipate risks and develop alternative plans. | R2.4.1, 2.4.2, 2.4.3; R2.7.1
---|---
Monitor and critically analyze current therapy with respect to necessity, rationale, drug of choice and influence on therapy of medical problems, disease states and concurrent medications. | R2.4.1, 2.4.2, 2.4.3; R2.7.1
Analyze pediatric drug regimens and recommend adjustments, in order to maximize patient therapeutic response. | R2.4.1, 2.4.2, 2.4.3; R2.9.1; R2.10.1, 2.10.2
The resident will perform therapeutic drug monitoring for any patient on the pediatric cardiovascular surgery service in the pediatric intensive care unit receiving a medication that requires serum concentration determinations and document recommendations in the patient’s chart. All consults must be staffed with the preceptor. | R2.7.1; R2.9.1, 2.9.2; R 2.10.1, 2.10.2, R 2.12.1, 2.12.2
A patient profile (derived from the chart, progress notes, and MAR), including dose in mg/kg, will be maintained for each patient on the service. Evaluate each child’s drug therapy for:
- Appropriateness of dosing regimen and route of administration based on age, weight and disease state
- Allergies, therapeutic duplication, therapeutic outcomes, avoidance of adverse reactions and negative drug interactions
- Abnormal physical and laboratory parameters due to medications and/or diseases | R2.121.1

### Methods of Evaluation

Evaluation of residents will be based on the above learning experience goals and objectives. The preceptor and resident will review the resident’s customized plan and the learning experience rotation document on the first day of rotation. Feedback will include, but not be limited to: verbal and/or written mid-point and end of rotation evaluations of the resident, preceptor and learning experience.