The Hospital Pharmacy Operations 2 Rotation

The goal of this four-week rotation is to advance the student's hospital practice ability through clinical services and patient care activities. The student is to complete all required clerkship activities and work towards improvement in competency with the learning objectives. It is suggested for both the student and preceptor to periodically review their progress towards these goals. Throughout this rotation, the student is expected to maintain professional and ethical standards of conduct.

During the first few days of the program, the student should be oriented to the hospital, the pharmacy, and pertinent policies and procedures. The following are suggested:

- Attend the hospital's and new employee's orientation program
- Take a guided tour of the hospital layout and department areas
- Become familiar with the pharmacy layout and basic functions
- Learn how and where to access available resources, such as references, computers, library, journals, databases, etc.
- Meet other pharmacy employees
- Understand expectations with regards to dress, conduct, and scheduling of hours
- Obtain a copy of the policy and procedures manual
- Understand HIPPA (Healthcare Insurance Portability and Accountability Act) and confidentiality of information
- Assess opportunities for skill-based competency sign offs at this rotation site
- The student is encouraged to share his/her portfolio with the preceptor during the first week of the rotation. The preceptor may then tailor the rotation to meet the specific needs of the student.

Required Hospital Pharmacy Clerkship Activities

1. Documented eight pharmacist interventions- the student must have participated with them.
2. Minimum of three completed patient medication histories- student should prepare a SOAP note afterwards, summarizing the information gained from the interviews.
3. Care plans for a minimum of three patients- the student may use the care plan forms in this manual, or ones devised by themselves or the institution. Care plans must include a prioritized problem list.
4. Accompaniment with physicians, pharmacists, and/or other healthcare personnel as they monitor and visit patients, suggested 2 weeks- examples include:
   - Accompany a physician or other health practitioners during patient appointments
   - Round with a clinical pharmacist or other healthcare representatives
   - Visit with other departments in hospital such as: cardiac catheterization lab, dialysis, discharge planning, emergency department, endoscopy, infection control, physical therapy, radiation, radiology, respiratory therapy, surgery, wound care, etc.
5. Presentation(s)- one patient based presentation is required. A second presentation tailored to the interests of the student and the needs of the rotation site is recommended (see examples under "potential activities", below).
6. Complete hospital pharmacy modules - in conjunction with preceptor.

Learning Objectives

1. Given a patient's profile:
   - Identify medication-related problems
   - Locate the possible offending agent given a described side effect
Locate adverse drug reactions
List contraindications/precautions of treatment options
Develop a prioritized problem list
Recommend modifications in drug therapy to ensure effective, safe, and economical patient care
Be able to recommend laboratory tests and monitoring parameters (both efficacy and toxicity, as well as how often)
Monitor drug therapy

2. Locate the following information given a hospitalized patient's chart:
   - Patient problem list (may not be present)
   - Admission record
   - History and Physical
   - Past medical history
   - Physician's orders and progress notes
   - Nurses' notes
   - Medication administration record (MAR)
   - Laboratory tests, surgeries, and other procedures
   - Graphic charts or patient data sheets

3. For a given disease state, be able to:
   - Describe the pathophysiology and etiology
   - Provide the benefits and risks of treatment
   - List therapeutic parameters
   - Describe non-drug therapies, including life-style modifications
   - Address the pros and cons of drug treatment options

4. Be able to calculate and apply pharmacokinetics including:
   - Half-life, elimination rate constant, volume of distribution, lean body weight, and creatinine clearance
   - Estimate time to reach steady state and when/how often medication blood levels should be drawn
   - Estimate the time for a drug to be eliminated from the body

5. Communicate/collaborate with healthcare professionals and patients:
   - Regarding rational drug therapy, wellness, and health promotion
   - Through daily interactions, informal discussions, written recommendations, drug information responses, and formal drug therapy related presentations
   - Expand oral and written communication skills

6. Document interventions and pharmaceutical care outcomes

7. Retrieve, evaluate, manage, and transmit professional information and literature
   - Use for patient cases, therapeutic discussions, presentations, drug information responses and/or journal article review
   - Present to an audience of peers, pharmacy personnel, or other healthcare providers
   - Present an appropriate written response

Potential Activities for the Hospital Pharmacy Operations II Rotation

This list offers suggestions for student activities. Additional and/or alternative activities may be incorporated to accommodate the specific needs/offering of the site and student.

1. In-service to other healthcare professionals such as nurses, pharmacists, or physicians
2. Presentation of a drug formulary review to members of the P&T committee or to other healthcare professionals
3. Presentation of new information in Indiana law or Medicaid/Medicare regulations
4. Review of hospital systems or policies for effectiveness (like a mini-PharmD consulting project)
5. Conduct education programs for selected patient groups (i.e. patients with diabetes or heart disease)
6. Perform drug therapy consultations by appointment for chronic disease patients with complex drug regimens and multiple drug-related problems
7. Contribute to the pharmacy newsletter
8. Develop patient medication information sheets
9. Develop an informational bulletin board display
10. Develop and/or test appropriate forms and/or computer applications for the clerkship site
11. Visit and/or contribute to the services provided at a community healthcare clinic
12. Round with pharmacists or other healthcare providers
13. Conduct an audit of drug therapy implemented by the preceptor or other healthcare professional
14. Develop a new patient care service for the site
15. Attend Local and/or State Pharmacist Association Meetings (i.e. continuing education or legislative meeting)
16. Conduct a staff meeting
17. Any other presentations/projects proving beneficial to the practice site