Cardiovascular Specialists
{Cardiac ICU/Cardiology}

Description of Rotation:

Cardiovascular Specialists refers to the provision of medical services in cardiovascular in-patient setting. Specialists can focus on providing preventive care and/or the management of chronic cardiovascular conditions. Pharmacist-directed services may be medication selection in coronary care units, cardiovascular intensive care unit, and cardiovascular rehabilitation units.

Goals of Rotation:

Facilitate student learning and critical thinking skills in a Cardiovascular Specialists environment in order to:

1. Understand patient healthcare needs.
2. Apply evidence-based medicine.
3. Enhance and reinforce didactic course work.
4. Develop interpersonal communication skills.
5. Describe the pathophysiology of common illness.
6. Explain monitoring parameters given the particular disease state and the treatment regimen (including efficacy, toxicity, side effects, and potential drug interactions).
7. Provide non-pharmacological treatment for disease states.

Learning Objectives:

Upon completion of this rotation the student should be able to:

1. Describe the symptomatology, physical findings, pathophysiology, diagnostic procedures, laboratory tests, primary and alternative pharmacotherapies, and non-pharmacological treatments for disease states encountered during the rotation.
2. Describe and understand the general principle of immunization, including appropriate schedules as well as immunizations required in specific patient populations. Demonstration of proper injection technique may also be assessed.
3. Provide recommendations for medication dose adjustments based upon pharmacokinetic and pharmacodynamic principles.
4. Provide appropriate monitoring parameters for the chosen treatment plan (including efficacy, toxicity, side effects, and potential drug interactions).
5. Effectively communicate the drug treatment plan to the patient with appropriate precautions and expectations.
7. Counsel patients on commonly prescribed medications and devices (i.e. blood glucose meters, peak flow meters, inhalers, etc.).
8. Develop plans to manage commonly encountered disease states, which may include: hyperlipidemia, diabetes mellitus, hypertension, congestive heart failure, and arrhythmias
9. Discuss the benefits and limitations of alternative medicine (i.e., herbal therapy, biofeedback, etc.).
10. Document all appropriate recommendations and interventions.
11. Provide assistance on Codes

Activities:

1. Patient interviews and care plans
   a. Medication Therapy Management
   b. Patient goal setting
2. Case/disease state presentations and discussions
3. Research drug information question
4. Educational programs
   a. Patients
   b. Medical Staff
   c. Students
5. Newsletter
6. Physical Assessment
   a. CPR
   b. ACLS
7. Define patient goals for each disease state
8. Data collection
9. Required Readings

Common disease states encountered in the outpatient setting (*list not inclusive*):

1. Clotting disorders
2. Arrhythmias
3. Stroke
4. Acute Coronary Syndrome
5. Hypovolemic Shock
6. Heart Failure
7. Diabetes /Metabolic Syndrome
8. Dyslipidemia
9. Hypertension
10. Asthma/COPD
11. Thyroid Disorders
12. GERD
13. CHF
14. Anemia
15. Pain Management
16. PAD
17. Nutrition
18. Allergies
19. Obesity
20. Depression
21. Mood disorders
22. Infectious Diseases
23. URI
24. Osteoporosis
25. Osteoarthritis
26. Weight Loss
Potential longitudinal activities to accomplish at site:

1. Identify and collect appropriate drug-related monitoring parameters for each assigned patient
2. Maintain an adequate patient data base for each assigned patient
3. Identify and prioritize drug-related problems for each assigned patient
4. Assess the appropriateness of each assigned patient’s drug therapy
5. Construct a detailed pharmaco-therapeutic plan for each assigned patient
6. Present all patient data in a concise and meaningful fashion
7. Provides evidence-based regimen and monitoring plans for each patient
8. Obtain and write-up a patient medication history
9. Provide medication information to a unique cultural and socioeconomic diverse patient
10. Provide a recommendation and counseling on an OTC product
11. Counsel a patient on their medications
12. Provide a verbal therapeutic plan recommendation to another health-care professional
13. Perform medication reconciliation for patients
14. Interpret diagnostic tests results for patient/caregiver/or preceptor
15. Take a patient’s blood pressure
16. Take a patient’s pulse
17. Assess a patient’s peripheral edema
18. Take a patient’s respiratory rate
19. Assess a patient’s temperature
20. Provide an optimal pain management or palliative care plan for a patient
21. Observe a Health Care professional perform a full physical examination and assess results
22. Make a warfarin dosage adjustment based on patient parameters
23. Recommend empiric antibiotic therapy
24. Recommend antibiotic therapy based upon a culture and sensitivity
25. Assess the significance of a drug-drug interaction
26. Adjust a drug dose in a patient with renal insufficiency
27. Determine monitoring parameters for a patient being treated for an infectious disease
28. Prepare a written pharmacokinetic consultation
29. Prepare a handout for case presentation
30. Prepare an article for a newsletter or publication
31. Prepare a patient education sheet
32. Prepare a written drug information response in a practice setting
33. Provide an education presentation to pharmacists
34. Provide an education presentation to other health care professionals
35. Lead a Journal Club discussion
36. Participate in a Patient/Medication Safety Review or error reduction program
37. Develop a community-based educational initiative
38. Participate in a discussion of a pharmacist role in ethical issues related to any of the following topics: end of life care, professional behavior, clinical research, and pharmacy current event/hot button issue