Compounding Pharmacy

Description of Rotation: This rotation is designed to enhance the basic skills learned in the Introductory Pharmacy Practice Experience (IPPE). Skills developed and refined in this rotation include basic and advance compounding, pharmacy math, patient counseling on unique drug formulations, determining the correct ratio of hormone product for hormone replacement therapy. This rotation might also include skills developed in a community pharmacy setting such as the ability to process and dispense medication, patient education regarding medical condition, wellness, dietary supplements, durable medical equipment, and medical and drug devices medication therapy management, recommends over-the-counter products, and retrieving, evaluating, managing, and using clinical and scientific publications.

Goals of Rotation:

1. Facilitate student learning and thinking of the community/compounding patient’s needs.
2. Understand the patient health care needs.
3. Utilization of evidence based medicine.
4. Enhance and reinforce didactic course work.
5. Develop interpersonal communication skills.
6. Adopt and practice ethics and integrity for site and career.
7. Formulate an understanding of laws and regulations for the practice site
8. Describe the pathophysiology of common illness
9. Explain monitoring parameters given the particular disease state and the treatment regimen (including efficacy, toxicity, side effects, and potential drug interactions)
10. Provide non-pharmacological treatment for disease states
11. Provide patient education
12. Utilize and educate patients on medical devices and medical aids.
13. Refine skills learned in compounding lab.
14. Develop a formulation for a compound prescription using pharmaceutical math skills.

Learning Objectives:

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

1. Monitor and evaluate patient profiles for:
   a. drug allergies
   b. adverse reactions
   c. inappropriate drug use
   d. drug-drug interactions
   e. compliance

2. Make drug therapy recommendations to physicians as well as lifestyle changes to the patients.
3. To be able to complete a thorough medical history of a patient.
4. To advise and give a selection of clinical choices to a prescriber.
5. To effectively communicate with support staff, professional staff, and prescribers.
6. To understand the business model and get a sampling of all details and terminology of managing a business.
7. Utilize their pharmacology and understanding of disease states to effectively monitor a patient’s health with the confidence to make suggestions to prescribers for adjusting drug regimen therapy.
8. Develop physical assessment skills in evaluating over the counter recommendations.
9. Create and implement patient outcome documentation skills as well as intervention documentation.
10. Develop format for complete patient profiles and proper documentation.
11. Identify and utilize the best reference sources to assist pharmacists in the compounding pharmacy based practice.
12. To be able to experience some unique roles in the Compounding Pharmacy Practice setting.
13. Complete a MTM service with a patient.

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. Community Pharmacy based pharmaceutical care.
7. The latest technology available to Community/Compounding Pharmacy.
8. Advanced Compounding
9. Determining the rational of hormones needed in a product for hormone replacement therapy
10. Sound business practices in Community Pharmacy.
11. Learn the practical application of pharmacy law.
12. Medication therapy management. (MTM)
13. Effective communication between patient, prescribers, and pharmacists.
14. Effective marketing of Home Medical Equipment and Compounding.
15. Physical Assessment
16. Define patient goals for each disease state
17. Data collection
18. Required Readings
Disease States Encountered *(list not inclusive)*:

1. Diabetes  
2. Hyperlipidemia  
3. Hypertension  
4. Asthma  
5. Metabolic Syndrome  
6. Thyroid Disorders  
7. GERD  
8. PUD  
9. Anemia’s  
10. Pain Management  
11. Headache  
12. Menopause  
13. Vaccinations  
14. Dental Conditions  
15. Nutrition  
16. Allergies  
17. Urologic Disorders  
18. Smoking Cessation  
19. Infectious Diseases  
20. Cough/Cold  
21. Skin Disorders  
22. Diarrhea/Constipation  
23. Sleep Disorders  
24. Otic/Ophthalmic conditions  
25. Ophthalmic conditions  
26. Oral Health  
27. Medical Devices/Equipment  
28. Point of Care testing Devices  
29. Dietary/Herbal Supplements  
30. Foot Care  
31. Minor Wounds  
32. Acne  
33. Benign Prostatic Hyperplasia  
34. Depression  
35. Erectile Dysfunction  
36. Hormone Replacement  

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 pharmacotherapeutic plan for each assigned patient  
6. Present all patient data in a concise and meaningful fashion  
7. Provides evidence-based regimens 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 recommendation and counseling on a OTC point of care testing device  
13. Provide a recommendation for a complementary or an alternative medication/product or therapy  
14. Provide a verbal therapeutic plan recommendation to another health-care professional  
15. Perform medication reconciliation for patients  
16. Interpret diagnostic tests results for patient/caregiver/or preceptor  
17. Take a patient’s blood pressure  
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. Assess the significance of a drug-drug interaction  
22. Assess a body surface area (BSA) for an adult  
23. Assess an ideal body weight (IBW) for an adult  
24. Adjust a drug dose in a patient with renal insufficiency  
25. Assist in explaining to a patient or caregiver their health-insurance options  
26. Prepare a handout for case presentation
27. Prepare an article for a newsletter or publication
28. Prepare a patient education sheet
29. Prepare a written drug information response in a practice setting
30. Provide an education presentation to pharmacists
31. Provide an education presentation to other health care professionals
32. Lead a Journal Club discussion
33. Participate in a Patient/Medication Safety Review or error reduction program
34. Develop a community-based educational initiative
35. Discuss or Implement, evaluate, and obtain reimbursement for MTM services
36. 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