

DEFINITIONS OF P4 ADVANCED PHARMACY PRACTICE ROTATIONS

REQUIREMENT:

Each P4 student is required to complete **eight, five-week** (200 hours each) Advanced Pharmacy Practice Experience (APPE) rotations within a nine-rotation block schedule. A description of the different types of rotations is provided below. The requirements are as follows:

CORE PATIENT CARE ROTATIONS

- One (1) Acute Care Rotation
- One (1) Ambulatory Care Rotation
- One (1) Hospital/Health-System (Institutional) Rotation
- One (1) Community Pharmacy Rotation
- One (1) Acute Care Rotation **OR** Ambulatory Care Rotation
- One (1) Patient Care Elective **OR** Additional Core Category Rotation

ELECTIVE ROTATIONS

- Two (2) Elective Rotations
 - Can be patient care, or non-patient care

OFF ROTATION (“off block”)

- One (1) Off Rotation during a time chosen by the student

DESCRIPTIONS

Acute Care Rotation: (*Inpatient clinical pharmacy practice*)

During this rotation students will develop their pharmaceutical care skills for patients who are in an institution (e.g., hospital). Patients are acutely ill and often require complex and/or urgent medical attention. Patient care skills to be developed encompass the Pharmacist Patient Care Process and include:

- Proper use of patient-specific comprehensive data (patient/caregiver interviews, past medical records, medication history, physical exam findings, diagnostic and laboratory data) for making drug therapy decisions that reflect pharmaceutical care.
- Developing safe and cost-effective patient-specific pharmaceutical care plans with specific goals to resolve or prevent drug-related problems. These plans should be developed using previously gathered data and knowledge of pharmacokinetics, pharmacodynamics, social, cultural, ethical and humanistic factors.
- Proper implementation of patient-specific pharmaceutical care plans through written and oral communication. Plans should be communicated so that patients as well as other health care providers can understand their scope, nature and importance. Plans should inform all those involved of the risks and benefits of therapy, as well as clearly outline the proper use and desired outcome.
- Clearly document, using appropriate style and language, pharmaceutical care plans and patient care activities in the medical chart.
- Monitoring of patient-specific pharmaceutical care plans through collection and interpretation of pertinent data. All care plans should be assessed to see if previously defined goals have been

achieved. In assuming the responsibility for outcomes it may be necessary at times to reevaluate treatment plans or therapeutic goals.

- Communication and medication therapy evaluation and intervention may occur with prescribers, nurses, patients, or patient families, and/or via communication within the electronic health record.

Ambulatory Care Rotation: (*Outpatient clinical pharmacy practice*)

During this rotation students will develop their pharmaceutical care skills for patients who are ambulatory (e.g., in a clinic or a pharmacy care center). Patients are ambulatory, with chronic disease management needs, such as outpatient follow-up for adherence, proper medication dosing, and/or monitoring of medication safety and effects. Patient care skills to be developed encompass the Pharmacist Patient Care Process and include:

- Proper use of patient-specific comprehensive data (patient/caregiver interviews, past medical records, medication history, physical exam findings, diagnostic and laboratory data) for making drug therapy decisions that reflect pharmaceutical care.
- Developing safe and cost-effective patient-specific pharmaceutical care plans with specific goals to resolve or prevent drug-related problems. These plans should be developed using previously gathered data and knowledge of pharmacokinetics, pharmacodynamics, social, cultural, ethical and humanistic factors.
- Proper implementation of patient-specific pharmaceutical care plans through written and oral communication. Plans should be communicated so that patients as well as other health care providers can understand their scope, nature and importance. Plans should inform all those involved of the risks and benefits of therapy, as well as clearly outline the proper use and desired outcome.
- Clearly document, using appropriate style and language, pharmaceutical care plans and patient care activities in the medical chart.
- Monitoring of patient-specific pharmaceutical care plans through collection and interpretation of pertinent data. All care plans should be assessed to see if previously defined goals have been achieved. In assuming the responsibility for outcomes it may be necessary at times to reevaluate treatment plans or therapeutic goals.
- Understanding use of available medication assistance programs to help ensure patients' access to medications
- Communication and medication therapy evaluation and intervention may occur with prescribers, nurses, patients, or patient families, in-person, telephonically, and/or via communication within the electronic health record.

Hospital/Health-System Pharmacy Practice Rotation: (*General hospital pharmacy practice*)

During this rotation students will develop competence in understanding and actively participating in the workflow of hospital pharmacy operations. Experiences may include but are not limited to:

- Maintaining and controlling medication inventory
- Understanding medication distribution and documentation systems, including automation and robotics
- Use of the electronic health record
- Use of the Pharmacist Patient Care Process for medication therapy prescribing and order verification for safety of medication selection, dosing, route, and monitoring for effect

- Preparation of intravenous medications including total parenteral nutrition and chemotherapy
- Clinical pharmacy services provided (i.e., pharmacokinetic services, anticoagulation services, antibiotic stewardship programs)
- Medication formulary management
- Providing drug information and education to patients
- Communication with other members of the healthcare team (e.g. nurses, physicians) and/or with patients
- Understanding hospital-based protocols for clinical programs such as pharmacokinetics, therapeutic interchange, IV-to-oral switch, renal dosing
- Pharmacy department management and workflow
- Quality improvement/assurance initiatives

Community Pharmacy Practice Rotation: *(General community pharmacy practice).*

During this rotation students will develop competence in understanding and actively participating in community pharmacy operations. Experiences may include but are not limited to:

- Evaluating and preparing prescriptions for dispensing to patients
- Providing drug information and education to patients
- Provide initial and ongoing evaluation of drug therapy
- Communicate with patients about non-prescription products, devices, and diagnostics
- Understanding health insurance navigation and health plan requirements
- Completing Medication Therapy Management (MTM) services such as Comprehensive Medication Reviews (CMRs) and Targeted Medication Reviews (TMR)
- Advanced drug compounding
- Maintaining and controlling medication inventory
- Understanding distribution and documentation systems, and health record/patient profile access
- Understanding use of available medication assistance programs to help ensure patients' access to medications
- Developing competent pharmacy management skills
- Manage and supervise pharmacy personnel

Patient Care Elective Rotation:

During this rotation, students will develop an understanding of aspects of direct and indirect patient care, for example, patient counseling/discussions over the phone or in clinic, formulary decision-making and protocol development, use of surveillance or monitoring reports to impact patient medication management, designing/implementing clinical or operational pharmacy services, and/or medication safety. A blend of individual patient or specific patient population-based care activities will take place but will not encompass the entire rotation. All students on the rotation should have the same opportunity for patient care exposure. Examples of patient care electives may include, but are not limited to:

- Compounding
- Formulary decision-making/clinical protocol development
- Home Infusion

- International experiences (hospitals, community pharmacies, clinics)
- Investigational drugs
- Informatics
- Long-term care
- Medication safety
- Nursing home consulting
- Administration/leadership
- Managed care (MTM, adherence, etc.)
- Specialized practice sites (behavioral health, pediatrics)
- Specialty pharmacy (patient care/medication management focus)

Elective Rotation: *(Unique and alternative pharmacy practice)*

During this rotation, students may explore unique and alternative pharmacy practices. Minimal time is spent on patient-centered care in these settings. These settings are advanced and specialized areas of pharmacy practice for the student to experience. Examples of electives may include:

- Academia
- Research
- Business innovations (i.e., software development, supply chain management)
- Centers for Disease Control and Prevention
- Food and Drug Administration
- International experiences (academic institutions, research)
- Pharmaceutical Industry
- Pharmacy Law
- Pharmacy or National Association Management