

# Lower Mainland Pharmacy Services PHARMACY PRACTICE RESIDENCY PROGRAM



## Drug Distribution Rotation Manual

### Sites and Preceptors:

**Surrey Memorial Hospital:** Ray Jang, Sunny Gidda, Yvonne Huang

**St. Paul's Hospital:** Winnie Ma, Jeremy Li, Pauline Mosberian

**UBC Hospital/Vancouver General Hospital:** Gordon Tse / Raymond Lee

**Lions Gate Hospital:** Anca Cvaci (Marilyn Chadwick)

**Richmond Hospital:** Steve Chong

### DESCRIPTION

This is a 3 week practical rotation occurring at multiple sites as above. Each resident will complete the practical portion primarily at a single site.

The overarching goal is for residents to gain a thorough understanding of the many facets of drug distribution systems and how they function in relation to the delivery of patient care in hospitals.

### COMPETENCIES [CPRB 2018 Standards 3.2 Manage and Improve Medication Use Systems]

1. The resident shall be able to relate the advantages and limitations of key components of the medication-use system used to provide medications to patients. Examples may include but are not limited to unit dosing, traditional dispensing, computerized medication administration records, e-prescribing, clinical decision-support tools, barcode administration, compounding, and intravenous and/or oncology admixture services.
2. The resident shall work in cooperation with pharmacy, nursing, and medical staff, as well as other members of the organization's team, to improve medication use for individual patients and groups of patients.
3. The resident shall demonstrate an understanding of the policies and procedures used to prepare and dispense medications in accordance with patients' needs.
4. The resident shall demonstrate an ability to assess medication orders and to identify and resolve problems.
5. The resident shall demonstrate the ability to clarify medication orders with prescribers and document such clarifications appropriately.
6. The resident shall demonstrate the use of safe medication practices.

**EXPECTED LEVELS OF PERFORMANCE** [CHPRB Accreditation Standards – Levels & Ranges]

Below Expected Level	Expected Level	Beyond Expected Level
<p>The resident:</p> <ul style="list-style-type: none"> <li>• provides inaccurate or incomplete explanations of drug distribution systems within the health care organization, thereby resulting in incorrectly written prescriptions, lack of timely availability of or access to medications, etc.</li> <li>• lacks awareness or provides inaccurate descriptions of the role of pharmacists and other health care providers within the drug distribution system</li> <li>• is unable to consistently assess/evaluate orders to ensure safe and effective use of medications consistent with health care organizational policies and practices</li> <li>• utilizes inaccurate, inconsistent, or incomplete medication incident reporting systems</li> <li>• is unable to effectively teach or explain principles and practices related to safe medication use within the health care organization</li> <li>• is inconsistent or unclear in documentation</li> </ul>	<p>The resident is able to:</p> <ul style="list-style-type: none"> <li>• clearly, concisely, and completely describe the functioning of the drug distribution system and medication prescribing processes within the health care organization to another health care professional</li> <li>• assess prescriptions for accuracy, appropriateness, and adherence to health care organizational policies and practices</li> <li>• consistently identify and complete medication incident reports</li> <li>• explain, and educate others about health care organizational practices and policies related to preparation of sterile products (such as cytotoxic agents, parenteral nutrition, injectable medications), and narcotic and controlled drugs</li> <li>• document prescriptions and prescription changes clearly and completely, consistent with health care organizational policies and practices</li> </ul>	<p>The resident:</p> <ul style="list-style-type: none"> <li>• independently applies knowledge related to drug distribution systems and medication prescribing processes to improve efficiency and effectiveness of health care delivery within a team-based context</li> <li>• is able to critically analyze medication incident reports and provide recommendations to prevent future incidents from occurring</li> <li>• is able to identify system-level areas for improvement in drug distribution systems</li> <li>• is able to identify gaps in current policies related to documentation of prescriptions and prescription changes, and suggest alternatives</li> <li>• independently, accurately, correctly and efficiently prepares sterile products (including cytotoxic agents) after completion of a health care organization's training program</li> </ul>

**LEARNING OBJECTIVES**

At the end of the rotation the resident shall be able to:

1. Describe all legal requirements and professional standards that pertain to the distribution and control of drugs in health care organizations.
2. Demonstrate evidence of understanding of policies and procedures relating to drug distribution and administration.
3. Explain the principles, advantages and disadvantages of the drug distribution systems used in health care organizations.
4. Describe the role of drug distribution as a component of the provision of pharmaceutical care.
5. Identify potential drug-related problems that could occur as a result of the health care organization's distribution system and identify ways to prevent their occurrence.
6. Describe the role of pharmacists, pharmacy technicians, pharmacy assistants, and other support personnel in the functioning of the drug distribution system.
7. Identify real or potential drug-related problems through the review of patient-specific medication profiles and initiate appropriate action.
8. State the benefits and limitations of using a profile for pharmacotherapy monitoring and drug distribution.
9. Explain the process or submit a medication incident reporting and analysis.
10. Describe key elements of the NAPRA model standards for pharmacy compounding of sterile preparations.
11. Describe the advantages and limitations of a pharmacy-based intravenous admixture service.
12. Describe the specialized equipment used in an intravenous admixture service, including TPN, and describe the techniques and technology that may be used to increase efficiency and productivity of the service.
13. Describe the unique requirements of a chemotherapy admixture service, and the key elements of the NAPRA model standards for compounding of hazardous drugs.
14. Describe other types of parenteral drug delivery systems and programs (e.g., PCA, home IV therapy, etc.).

## **RESIDENT'S OWN OBJECTIVES**

Residents will identify several of their own objectives for the rotation. These should be documented in their one45 portfolio and reflected upon at evaluation points during the rotation. These aren't part of the formal assessment process.

- 1.
- 2.
- 3.

[there is no limit to the number of objectives a resident may identify]

## **REQUIRED ACTIVITIES [modifiable based on resident's prior learning/experience]**

The Learning Objectives will be met through a variety of means including:

1. Participation in a workshop series held during Academic Half Days. These sessions will include interactive discussion, hands-on learning, case/problem-solving, didactic teaching, and assignments.
2. Observation of and/or participation in:
  - Purchasing, backorder strategies (function, philosophy, and practice)
  - Wardstock/ADM top-up, medication storage on wards (function, philosophy, and practice)
  - Prepackaging / manufacturing (function, philosophy, and practice)
  - Order entry or verification (function, philosophy, and practice) – *as it applies to the site*
  - Dispensary workflow from receipt of order to delivery to patient
  - Product checking (function, philosophy, and practice)
  - Long Term Care drug distribution (if applicable at placement site)
  - Intravenous admixture and chemotherapy preparation
  - Narcotic and controlled drugs (function, philosophy, and practice)
  - Emergency release and investigational drugs (function, philosophy, and practice)
  - Non-formulary drugs, "patients' own" (function, philosophy, and practice)
  - Medication error / incident reporting (function, philosophy, and practice)
  - Interacting with health care team members to resolve drug-related problem
  - Development of new policies and procedures

For all activities, residents will review all applicable professional standards, policies and procedures and regulatory laws, bylaws, regulations, and guidelines.

Time spent on each of these objectives should focus on the *learning objectives*.

**WORKSHOP SERIES** (during Academic Half Day Program. Consult AHD Program schedule in one45.com for date, time, location, pre-reading, objectives)

1. Introduction to Drug Distribution systems, case scenarios
2. Legal requirements & Professional standards
3. Advantages & disadvantages of drug distribution systems and their role in Pharmaceutical Care provision.
4. Policy and procedure development

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5. Team roles
6. Communication and teamwork
7. Medication profiles and Drug Related Problems
8. Medication incident reporting and analysis
9. Aseptic Technique
10. Chemotherapy, TPN, CIVA preparation
11. Home IV, PCA

## **EVALUATION PROCESSES**

**Residents must achieve a “successfully completed” on BOTH the oral and written evaluation components.**

### **Oral Assessment**

1. The resident will be evaluated by means of a 30 minute oral exam, to be administered by the rotation preceptor. It will consist of 5-6 open-ended questions aimed at providing the resident with the opportunity to demonstrate having met the rotation learning objectives.
2. Residents whose performance on the exam is deemed unsatisfactory will be required to repeat the exam within one week. The repeat exam will have different questions compared to the initial exam.

### **Written Assessment**

A written assessment of the resident by the rotation preceptor will be completed in one45.com at the end of the rotation. This assesses performance domains not covered by the oral assessment such as motivation, problem-solving ability, assignment completion, etc. The Resident Assessment form can be viewed at <http://www.lmpsresidency.com/residents/resident-manual/evaluation-outcomes>

## **REQUIRED READING**

Residents should consult their one45.com “My Rotations” schedule to see if there are any pre-reading materials for this rotation.