

Lower Mainland Pharmacy Services
PHARMACY PRACTICE RESIDENCY PROGRAM



Quality & Medication Safety
Lower Mainland Pharmacy Services
Rotation Manual

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DESCRIPTION

Quality & Medication Safety is two of the newest specialties in pharmacy practice. Not only are they not taught in a traditional pharmacy or medical curriculum, successful practice involves the understanding and navigation of a complex health care system. This LMPS Residency rotation involves didactic and hands on learning experiences, which may occur at any of the 31 pharmacies within LMPS; most of the resident's time will be spent at LMPS administrative offices at Support Services Facilities (SSF), Langley or Heather Pavilion (HP), Vancouver General Hospital.

LMPS is the largest institutional pharmacy program in British Columbia consisting of approximately a thousand pharmacists, pharmacy technicians, pharmacy assistants and nurses who distribute and influence the use of millions of medication doses each day. During the rotation, the resident will help support LMPS departments to achieve strategic quality and medication safety priorities.

GOAL

The resident will develop the knowledge, project implementation and organizational skills

required to effectively facilitate implementation of quality or medication safety initiatives. By the end of the rotation, the resident should be able to describe quality and medication safety principles and provide examples of where and when the principles are to be applied.

LEARNING OBJECTIVES

Upon completion of the 4-week rotation, the resident will:

1. Demonstrate an understanding of Quality & Medication Safety priorities, processes and projects.
2. Demonstrate an understanding of the Patient Safety and Learning System.
3. Demonstrate an understanding of incident analysis (Root Cause Analysis) and proactive risk assessment (Failure Mode and Effects Analysis)
4. Demonstrate proficiency in developing, testing and implementing changes by using improvement models such as:
 - The Model for Improvement
 - LEAN
 - Positive Deviance
5. Understand the importance of organizational culture, human factors design and change management in improving Quality & Medication Safety.
6. Demonstrate the ability to provide non-clinical information to health care professionals in the role of a consultant.
7. Demonstrate proficiency in presenting critical literature evaluations (including grey literature) and teaching to pharmacists or other healthcare professionals, where the opportunity arises.

ROTATION-SPECIFIC OBJECTIVES

Demonstrate the ability to understand and apply quality/medication safety principles through the successful completion of a project that is reflective of an actual quality or medication safety initiative that extends throughout the appropriate LMPS health authorities.

RESIDENT'S OWN OBJECTIVES

Residents will identify several of their own objectives for the rotation. These should be documented in their ePortfolio and assessed at evaluation points during the rotation.

1. _____
2. _____
3. _____

REQUIRED ACTIVITIES

The Resident will:

1. Prepare topics for discussion with preceptor. These may include topics pre-selected by the preceptor as well as specific topics on which the student would like to expand their knowledge base.
2. The resident may be assigned one or more projects during his/her rotation. Assigned projects may vary in nature and duration.

3. Meet with the preceptor regularly (frequency to be established) to confirm progress of the identified project.
4. Prepare and deliver a presentation on project outcomes.
5. Complete and submit any relevant procedure logs to the preceptor via one45 during the course of the rotation. Please see <http://www.lmpsresidency.com/residents/resident-manual/procedure-logs> for further details.
6. Attend education sessions (journal clubs or other scheduled presentations), where available and appropriate.
7. Host one journal club for pharmacy staff, which involves summarizing and critically appraising a selected journal article.
8. Precept UBC OEE (Office of Experiential Education) and other undergraduate pharmacy students, where the opportunity arises.
9. Meet daily with preceptor to discuss issues of interest, controversies, on-going evaluation, and special topics.
10. Other activities as assigned by preceptor.

COMMUNICATION EXPECTATIONS

1. The Resident will discuss any questions or concerns he/she may have with her preceptor and review all information he/she provides as a Quality or Medication Safety consultant, unless otherwise arranged with the preceptor.
2. The Resident will notify the preceptor in advance of required off-site activities and absences.
3. The Resident shall notify the preceptor of all pre-scheduled commitments, such as Academic Half-Days, prior to the start of the rotation.

PRECEPTOR RESPONSIBILITIES

1. Introduce the Resident to the Quality & Medication Safety teams.
2. Provide orientation to Shared Services Facility and Heather Pavilion
3. Be available for consultation with Resident whenever possible.
4. Discuss topics with Resident as described above.
5. Provide feedback on work completed by the Resident
6. Schedule dates for presentations and meetings with other healthcare providers.
7. Keep the Resident informed regarding their availability for consultation and meetings.

EVALUATION PROCESSES

As detailed in the LMPS residency program policies at:

<http://www.vhpharmsci.com/residency/resources/evaluation.html>

REQUIRED READING

1. J Reason. Human error: models and management BMJ 320 (2000):768-70
2. G Baker et al. The Canadian Adverse Events Study: the incidence of adverse events among hospital patients in Canada. CMAJ 170(11) 2004:1678-86
3. CMPA Good Practices Guide (Patient Safety Domain): https://www.cmpa-acpm.ca/serve/docs/ela/goodpracticesguide/pages/patient_safety/patient_safety-e.html

4. Dennison et al. Creating an Organizational Culture for Medication Safety. *Nurs Clin N Am* 40 (2005):1-23
5. ISMP Canada. Do not Use: List of Dangerous Abbreviations, Symbols and Dose Designations. www.ismp-canada.org/dangerousabbreviations.htm
6. Irwin et al. Expanded Roles for Pharmacy Technicians in the Medication Reconciliation Process: A Qualitative Review. *Hosp Pharm*; 2017.52(1):44-53
7. Hollnagel et al. From Safety-I to Safety-II: A White Paper. *DMJ Safety*. 2013
8. Javitch. Making Individuals and Organizational Change Easier: Some key Questions to Consider.
9. J. Kotter. Leading Change: Why Transformation Efforts Fail. *Harvard Business Review*
10. J. Conger. The Necessary Art of Persuasion. *Harvard Business Review*
11. P. Hines et al. Staying Lean Page 3 to 10. *Cardiff University* (2008):3-10
12. Scoville R, Little K. Comparing Lean and Quality Improvement. IHI White Paper. Cambridge, Massachusetts: Institute for Healthcare Improvement; 2014.
13. Lawton et al. Positive deviance: a different approach to achieving patient safety. *BMJ*.

RESOURCES

1. CMPA Good Practices Guide Website link: <https://www.cmpa-acpm.ca/serve/docs/ela/goodpracticesguide/pages/index/index-e.html>
2. ISMP Canada <http://www.ismp-canada.org/index.htm>
3. ISMP US <http://www.ismp.org/default.asp>
4. CPSI <http://www.patientsafetyinstitute.ca/English/Pages/default.aspx>
5. BC Patient Safety and Quality Council <http://bcpsqc.ca/>
6. Safer Healthcare Now! <http://www.saferhealthcarenow.ca/EN/Pages/default.aspx>
7. Accreditation Canada Medication Management Standards 2018

ROTATION SCHEDULE – (SAMPLE)

This is an outline of the resident's rotation schedule. The resident's rotation will involve other activities that may not be listed on the schedule below.

Week 1: Medication Safety		Reading
Monday (SSF)	<ul style="list-style-type: none"> ▪ 0800 to 0900: Orientation to SSF and intro to Quality & Med Safety teams (Cliff) ▪ 0930 to 1030: MedRec (Cliff) ▪ Project discussion <ul style="list-style-type: none"> ○ Literature review, written report, and presentation 	N/A
Tuesday (VGH HP)	<ul style="list-style-type: none"> • 0830: Introduction to Medication Safety (Amy Wai) ▪ Organizational Structures – LMPS, Medication Safety Committees ▪ Safety Culture ▪ Medication Management Processes ▪ Human Factors Engineering ▪ Accreditation ▪ Medication Safety-related Policies ▪ Medication Incident and Adverse Drug Reaction Reporting ▪ Automation ▪ Failure Mode and Effects Analysis and Incident Analysis 	J. Reason, Baker et al., CMPA, Dennison et al.,
Wednesday (VGH HP)	<ul style="list-style-type: none"> ▪ 0830: Introduction to Medication Safety – continued (Amy Wai) 	Optional: Accreditation Med Management Standards 2018
Thursday (SPH Pharm)	<ul style="list-style-type: none"> • 0800 to 1000: PHC Medication Safety Committee (Amy Wai) • 0830: Introduction to Medication Safety – continued (Amy Wai) 	
Friday (VGH HP)	<ul style="list-style-type: none"> ▪ 0830: Introduction to Medication Safety – continued (Amy Wai) 	

Week 2: Medication Safety		Reading
Monday (VGH Pharm)	<ul style="list-style-type: none"> ▪ LMPs Drug Nomenclature Standards (Shelley Novak) ▪ Mini Project (Shelley Novak) 	ISMP Do not use list
Tuesday (VGH Pharm)	<ul style="list-style-type: none"> ▪ Mini Project (Shelley Novak) ▪ 1400 to 1530 – VA Medication Safety Committee (Shelley Novak) 	N/A
Wednesday (RH Pharm)	<ul style="list-style-type: none"> • 0900: Smart Pump – Continuous Quality Improvement Data (Mark Wu) • 0900: Medication Reconciliation Process at RH (Mark Wu) 	Irwin et al.
Thursday (VGH HP)	<ul style="list-style-type: none"> ▪ 0800 to 1600: CST Order set Review (Mark Wu) 	N/A
Friday (RH Pharm)	<ul style="list-style-type: none"> ▪ 0800: Smart Pump - Continuous Quality Improvement Data (Mark Wu) ▪ 0800: Medication Reconciliation Process at RH (Mark Wu) ▪ Mid-point evaluation (Mark Wu, Shelley Novak & Cliff Lo) 	N/A

Week 3: Quality		Reading
Monday	<ul style="list-style-type: none"> ▪ Project day 	N/A
Tuesday (VGH HP)	<ul style="list-style-type: none"> ▪ 0900 to 1330: Strategic Plan / Extended Pharmacy Leadership Team Meeting ▪ 1400 to 1500: Start with Why (video by S. Sinek) followed by discussion ▪ 1500 to 1700: Project-time 	N/A
Wednesday (SSF)	<ul style="list-style-type: none"> ▪ 0800 to 1100: Project-time ▪ 1100 to 1200: LMPs Sterile Compounding Initiative (Cliff) ▪ 1300 to 1500: Project-time ▪ 1500 to 1600: discussion – <i>Change Management Strategies</i> (Resident to lead) ▪ Professional Change Drivers (video by P3 professionals) 	Javitch, Kotter, Konger,
Thursday (SSF)	<ul style="list-style-type: none"> ▪ 0800 to 1030: Project-time ▪ 1030 to 1200: My Right Knee (video by D. Berwick) followed by discussion ▪ 1300 to 1500: Project-time ▪ 1500 to 1600: discussion – <i>High Reliability Organizations</i> (Cliff) 	N/A
Friday (SSF)	<ul style="list-style-type: none"> ▪ 0800 to 1000: Project-time ▪ 1000 to 1200: Sterile Compounding Mapping Team Mapping ▪ 1030 to 1100: Review of project progress ▪ 1500 to 1600: What really matters at the end of life (video by BJ Miller) followed by discussion 	N/A

Week 4: Quality		Reading
Monday (SSF)	<ul style="list-style-type: none"> ▪ 0800 to 1030: Project-time ▪ 1030 to 1200: Exploring our roots (video by D. Berwick) followed by discussion ▪ 1300 to 1600: Project-time 	N/A
Tuesday (SSF)	<ul style="list-style-type: none"> ▪ 0800 to 1030: Project-time ▪ 1030 to 1200: Resilience (video by S. Dekker) followed by discussion ▪ 1300 to 1500: Project-time ▪ 1500 to 1600: discussion – <i>From Safety I to Safety II</i> (Resident to lead) 	Hollnagel et al.
Wednesday (SSF)	<ul style="list-style-type: none"> ▪ 0800 to 1200: Project-time ▪ 1030 to 1200: IHI Model for Improvement (video by R. Lloyd) followed by discussion ▪ 1300 to 1500: Project-time ▪ 1500 to 1600: discussion – <i>LEAN, IHI Model for Improvement, Positive Deviance</i> (Resident to lead) 	Hines et al., Scoville et al.,
Thursday (SSF)	<ul style="list-style-type: none"> ▪ 0800 to 1200: Project-time ▪ 1300 to 1400: Run charts & control charts (video by R. Lloyd) followed by discussion ▪ 1400 to 1600: Project-time 	N/A
Friday (SSF)	<ul style="list-style-type: none"> ▪ 0800 to 1200: Project-time ▪ 1200 to 1300: Presentation of project results ▪ 1300 to 1500: Open discussion (Resident to pick) ▪ 1500 to 1600: Final evaluation 	N/A