

# Island Health Pharmacy Practice Residency

## ORTHOPEDICS ROTATION



### Preceptor(s)

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### ROTATION DESCRIPTION

This rotation will involve the direct care of patients admitted to an Orthopedics unit for management of both surgical and non-surgical orthopedic diagnoses. This rotation is based in Victoria at the Royal Jubilee Hospital (RJH). This rotation will allow the resident to expand their knowledge in many areas of orthopedics, including, but not limited to, post-operative pain management, the management of chronic pain in non-surgical patients, VTE prophylaxis in a variety of surgical and non-surgical situations, treatment of related infections (osteomyelitis, septic arthritis, infective osteonecrosis, etc.), and the treatment and prevention of osteoporosis. If time and resources allow, the resident will also be given the opportunity to directly observe an orthopedic surgery.

The resident will be provided with the opportunity to learn about the role of the pharmacist within the patient care team, which serves a variety of orthopedic patients. They will also have the opportunity to make initial assessments and recommendations and then provide follow-up and monitoring for commonly encountered orthopedic conditions. The resident will work to identify and resolve each of their patient's drug therapy problems (DTPs), make suggestions to the interdisciplinary team, monitor therapy, and provide education and feedback regarding evidence-based approaches to treatment. The level of involvement may differ for each patient depending on patient-specific factors; however, every effort will be made to identify and assign patients to the resident for whom complex disease processes, complex medication regimens, or the presence of multiple actual or potential DTPs provide an opportunity for the most beneficial pharmacist involvement as well as an optimal experience for learning and skills development.

Each day, the resident will take on the care of at least one patient admitted to the unit. It is therefore expected that the resident will comprehensively work up and follow a minimum of 20 patients during their four week rotation. The number of patients a resident will be responsible for at one time will vary depending on the acuity and intensity of the patients admitted to the unit. Generally, this will be limited to 10-15 patients at one time. It is the responsibility of the resident to discuss workload with the preceptor if it becomes overwhelming. The preceptor will make every effort to ensure that workload is appropriate and applicable to the goals of the residency.

As new therapeutic topics arise that are relevant to each patient case, they will be covered daily via a combination of self-directed and preceptor-assisted learning. Scheduled therapeutic discussions on select topics will be confirmed at the start of the rotation, and other items may be discussed informally according to the resident's area(s) of interest/need for learning, as well as the types of patients encountered during the rotation. These topics will generally be preceded by assigned readings.

### ROTATION GOALS AND OBJECTIVES

**Goal 1:** Develop and integrate the knowledge required to provide direct patient care as a member of the interprofessional team.

**Objectives:**

The resident will be able to:

1. Relate knowledge of the pathophysiology, risk factors, etiology and clinical presentation of common medical conditions, including symptoms, physical assessment, relevant diagnostics, and laboratory findings, to patient-specific clinical findings to make appropriate, patient-specific drug therapy recommendations. (CPRB 3.1.4.e)
2. Relate knowledge of pharmacology, pharmacokinetics, pharmaceuticals, and evidence-based therapeutics to patient-specific clinical findings to make appropriate, patient-specific drug therapy recommendations. (CPRB 3.1.4.e)
3. Acquire and utilize knowledge of safe medication practices to manage and improve medication use for patients. (CPRB 3.2.5)

**Goal 2:** Demonstrate the necessary clinical skills to provide direct patient care as a member of the interprofessional team.

**Objectives:**

The resident will be able to:

1. Place a high priority on, and be accountable for, selecting and providing care to patients who are most likely to experience drug therapy problems. (CPRB 3.1.3)
2. Establish a respectful, professional, ethical relationship with the patient and/or their caregiver(s). (CPRB 3.1.4.a)
3. Gather relevant patient information through patient interview and from all appropriate sources. (CPRB 3.1.4.c.d)
4. Develop a prioritized medical problem list and describe the currently active issues that are responsible for the patient's admission or clinic visit. (CPRB 3.1.4.e)
5. Identify, justify, and prioritize a list of patient-specific drug therapy problems. (CPRB 3.1.4.b)
6. Advocate for the patient in meeting their health-related needs and their desired goals of therapy. (CPRB 3.1.2)
7. Identify, prioritize, assess, and justify a list of reasonable therapeutic alternatives and discuss pros/cons of each, considering efficacy, safety, patient factors, administration issues, and cost. (CPRB 3.1.4.e)
8. Develop, prioritize, justify, defend and implement a list of patient-specific recommendations for identified drug therapy problems. (CPRB 3.1.4.e.f)
9. Design and implement monitoring plans and/or plans for continuity of care that accommodate new or changing information. (CPRB 3.1.4.g)
10. Proactively provide patient education and seamless care. (CPRB 3.1.4.h)
11. Proactively communicate healthcare issues (including medication order clarifications) and care plans verbally to the appropriate team members and/or patient, as appropriate. (CPRB 3.1.4.f.i, 3.2.4.c)
12. Proactively document healthcare issues (including medication order transcriptions/clarifications) and care plans, as appropriate (CPRB 3.1.4.e.f.i, 3.2.4.b.c)
13. Effectively respond to medication- and practice-related questions and educate others in a timely manner, utilizing systematic literature search, critical appraisal skills and appropriate means of communication (verbal or written, as appropriate). (CPRB 3.5.1.a.b.c.d.e)

**Goal 3:** Demonstrate the attitudes and behaviours that are hallmarks of a practice leader and mature professional.

**Objectives:**

The resident will:

1. Demonstrate responsibility for own learning, through the refinement and advancement of critical thinking, scientific reasoning, problem-solving, decision-making, time management, communication, self-directed learning, and team/interprofessional skills. (CPRB 3.4.1)
2. Demonstrate commitment to the profession, collaboration and cooperation with other healthcare workers, and an understanding of the role of the pharmacist in the interprofessional team in the improvement of medication use for patients. (CPRB 3.1.1, 3.2.2, 3.3.3)

**Goal 4:** Develop and apply knowledge and clinical skills specifically related to this rotation.

**Objectives:**

The resident will:

1. Work with the preceptor to address all personal learning objectives identified at the beginning of the rotation.
2. In the synthesis of patient care plans, incorporate specific drug and disease knowledge in the following areas, as opportunity arises:
  - a. VTE prophylaxis
  - b. Pain management – both acute and chronic
  - c. Treatment and prevention of infection in orthopedic patients (including osteomyelitis, infectious osteonecrosis, septic arthritis, etc.)
  - d. Treatment and prevention of osteoporosis
  - e. Management of osteoarthritis
3. Demonstrate understanding of the following patient-related non-therapeutic knowledge as it pertains to the patients encountered in the rotation:
  - Ethical issues (e.g. treatment of pain and infections in palliative patients)
  - Cultural issues (e.g. implications of refusal of certain therapies, etc.)
  - Socioeconomic issues (e.g. risk factors for MRSA infections, ability to obtain and administer necessary medications for a safe discharge)
4. Be able to identify and utilize orthopedic related resources and guidelines.
5. Provide accurate and relevant drug information to other health-care members in a timely manner as requested and required.

**REQUIRED ACTIVITIES**

A general calendar of activities will be provided on the first day of the rotation. Some degree of flexibility will be required of the resident, as entries on the calendar may change due to the needs of the patients, unit, resident and preceptor.

The resident will:

1. Provide 5 (five) measurable and reasonable learning objectives on the first day of the rotation.
2. Present patient cases to preceptor on a daily basis and discuss appropriate management.
3. Prepare for and attend patient care rounds (bedside rounds or multi-disciplinary rounds).
4. Discuss select therapeutic disease states including pathophysiology and treatment.
5. Deliver a case presentation to pharmacy staff.
6. Participate in other activities as discussed (e.g. Journal Club, interdisciplinary education, attendance at educational rounds, etc.).

## **PRECEPTOR CONTACT TIME**

1. The preceptor will spend a minimum of one hour per day with the resident discussing patient cases and approaches to identification, prevention, and resolution of drug-related problems, development of therapeutic plans, and development of monitoring plans. This will not include time spent with the resident during patient care rounds.
2. The preceptor will spend a minimum of two hours per week with the resident discussing select therapeutic disease states.

## **EVALUATIONS AND ASSESSMENT**

The learning needs of the resident will be assessed and informal feedback will be provided to the resident regularly. The resident is expected to assume responsibility for his/her own learning and notify the preceptor if there are any concerns related to meeting any of the stated rotation objectives. Informal check-ins will be conducted to provide formative feedback frequently.

In addition, the resident and preceptor shall complete and review together the mid-point and final evaluations. The mid-point evaluations should be completed at the half-way point of the rotation. Final evaluations shall be completed at the end of the rotation.

### **Mid-point evaluations:**

- preceptor's evaluation of the resident

### **Final evaluations:**

- resident's self-evaluation
- resident's evaluation of the rotation and preceptor
- preceptor's evaluation of the resident (Direct Patient Care Rotation In-Training Evaluation of Resident, or ITER)