**Ambulatory Cardiology Rotation** Jim Pattison Outpatient Care and Surgery Centre 9750 140th St. Surrey

# DESCRIPTION

The Jim Pattison Outpatient Care and Surgery Centre (JPOCSC) strives to create better health within the community by providing an integrated and seamless network of outpatient health care services for residents of the Fraser Valley. JPOCSC offers surgery and surgical procedures, diagnostic tests and a variety of health clinics and programs. JPOCSC clinics are multidisciplinary in nature and include pharmacists, nurses, dietitians, mental health counsellors, social workers, occupational therapists, physical therapists, exercise therapists, physicians and nurse practitioners.

This 4-week rotation will expose the resident to the outpatient cardiology care of patients who are part of the chronic disease management (CDM) clinics. The majority of time will be spent in the heart health clinics which include the heart function clinic, cardiac rehabilitation and lipid clinics. The resident will also be exposed to patients who have cardiac conditions within the primary care clinic. In addition, the resident may be exposed to other chronic disease clinics within the CDM third floor centre. These include diabetes, pain, lung health and primary care. The resident will be working as part of the interdisciplinary team and provide pharmaceutical care to patients in a variety of clinics, with a focus on 2 to 3 clinics.

# GOAL

The resident will enhance his or her clinical skills required to provide pharmaceutical care to outpatients in the chronic disease setting. This will involve developing the ability to do thorough patient workups and prioritize patient care. The resident will become familiar with the most common disease states seen in the clinic setting and the associated pharmacotherapy. Literature retrieval and evaluation will also be encouraged during this rotation.

# LEARNING OBJECTIVES

Per those listed in the Direct Patient Care ITER, available at

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

# ROTATION-SPECIFIC OBJECTIVES

At the end of the 4-week CDM clinic rotation, the resident will be able to:

1. Demonstrate comprehensive patient histories, by collecting information from the patient, PharmaNet, the community pharmacy, physician, family members, and/or long term care facilities as appropriate.
2. Provide pharmaceutical care to patients seen in the clinics including:
	* Identifying and prioritizing drug-related problems
* Determining desired therapeutic outcomes
* Determining suitable alternatives for the patient
* Choosing a patient-specific recommendation with justification
* Providing a monitoring plan for the patient
* Providing appropriate follow-up
1. Demonstrate the ability to evaluate all information about the patient to determine if the current plan for the patient is appropriate. This may include obtaining information from the patient, their record, other health care professionals and/or retrieving and evaluating relevant literature.
2. Demonstrate the ability to clearly and concisely document clinical activities in the patient care record.
3. Demonstrate the ability to respond to drug information requests in a timely manner, retrieving and evaluating literature to formulate a response that will be relevant to the patient or situation.
4. Demonstrate a clear understanding of the following and their treatment in an outpatient setting, through therapeutic discussions, patient care activities and/or discussion of relevant therapeutic controversies:

Therapeutic discussions may include but are not limited to:

* + congestive heart failure,
	+ acute coronary syndrome (unstable angina and acute myocardial infarction)
	+ hypertension
	+ dyslipidemia
	+ atrial fibrillation

Other therapeutic topics that may be discussed include:

* + diabetes
	+ venous thromboembolism
	+ valvular disease
	+ hypo/hyperthyroidism
	+ anemia
	+ chronic kidney disease
1. Demonstrate an understanding of the pharmacotherapy commonly used in chronic disease management within specific conditions including indication, mechanism of action, dosage forms, strengths and concentrations, dose, route, monitoring parameters and cost.
2. Demonstrate the ability to conduct a thorough literature evaluation of a journal club article or controversial topic and present to the pharmacists or clinic staff.
3. Demonstrate the ability to do a case presentation or similar activity that involves an aspect of patient care in the outpatient clinic.

# 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.

# REQUIRED ACTIVITIES

1. Provide pharmaceutical care to CDM clinic patients within cardiology clinics Monday to Friday (8:30 am to 4:30 pm) during the 4-week rotation.
2. Discuss notes that are going to remain as a permanent part of the patient record and discuss recommendations regarding patient’s care with the preceptor prior to implementation, unless previously arranged with the preceptor.
3. Conduct seamless care activities for patients transferred to other clinics or hospital.
4. Provide medication counseling and medication calendars to patients or families as needed.
5. Create a running log of the patients seen at the clinic and their main condition, so that the preceptor can ensure you see a variety of patients throughout the course of the rotation.
6. Meet with the preceptor for approximately 1-2 hours per day to discuss patients, therapeutic discussions, and drug information questions that arise.
7. Be prepared for 2 therapeutic discussions per week with the preceptor, including required pre- readings and reviewing the associated pharmacotherapy. Therapeutic discussions may be incorporated into patient discussions with preceptor.
8. Conduct one journal club presentation to pharmacists or clinic staff on a recent, relevant article and discuss other relevant articles that are reviewed as a result of patient work-ups.
9. One case presentation or similar activity to pharmacists or other clinic staff.

# OPTIONAL ACTIVITIES

1. Attend medical, internal medicine or cardiology rounds if topic is relevant.

# GENERAL STRUCTURE OF THE ROTATION (this is an approximate timeline)

**Monday Tuesday Wednesday Thursday Friday**

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| OrientationInitial patient workup | Patient report | Patient report | Patient report | Patient Report Therapeutics topic |
| Patient report Therapeutics topic | Patient report | Patient report | Patient report | Patient Report Therapeutics topicMidpoint Evaluation |
| Patient report Therapeutics topic | Patient report | Journal Club Patient report | Patient report | Patient Report Therapeutics topic |
| Patient report Therapeutics topic | Patient report | Case presentationPatient report | Patient report | Patient Report Patient HandoverFinal Evaluation |

**Week 1**

**Week 2**

**Week 3**

**Week 4**

**COMMUNICATION EXPECTATIONS**

1. The resident will contact the preceptor 1 to 2 weeks in advance of the starting date, in order to discuss clinical interests and tailor rotation activities.
2. The resident will discuss his/her own personal rotation objectives on the first week of the

rotation.

1. The resident will notify the preceptor in advance of any required off-site activities and absences during the rotation.

# PRECEPTOR RESPONSIBILITIES

1. Orient the resident to JPOCSC, and the various CDM clinics. Ensure that the resident has computer, PharmaNet and Meditech access, as well as access to the pharmacy department and pharmacy working areas.
2. Introduce the resident to CDM clinic staff and pharmacy department staff.
3. Outline the goals and objectives of the rotation with the resident at the beginning of the rotation and work out a schedule for all of the rotation specific activities with the resident.
4. Be available to the resident for discussion of patient and therapeutic discussions on a daily basis. Available via phone or in person at all times during the resident’s rotation.
5. Assist the resident in the selection of a topic for their journal club and be available prior to the journal club to discuss the article with the resident.
6. Assist the resident in the selection of a topic for their case presentation and be available to review prior to the presentation.
7. Provide informal feedback to the resident on a daily basis so the resident is aware of the progress through the rotation. Conduct a verbal midpoint evaluation with the resident at the end of the second week, outlining strengths and areas to improve upon for the remainder of the rotation. At the end of the 4-week rotation, conduct a formal written and verbal endpoint evaluation with the resident.

# EVALUATION PROCESSES

As detailed in the LMPS residency program policies at:

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

# SUGGESTED READING & RESOURCES

**Before/during rotation:**

In addition, background reading in Dipiro or Koda-Kimble Therapeutic books and background information on disease states may be helpful and additional journal articles may be assigned. Be prepared to discuss the primary literature in the topics we will discuss e.g. major trials in hypertension, CHF, CVD

Title: Website:

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| --- | --- |
| Canadian CardiovascularSociety Guideline Library | <http://ccs.ca/index.php/en/guidelines-library> |
| ACC/AHA Guidelines | [http://my.americanheart.org/professional/StatementsGuidelines/ByTopic/TopicsA](http://my.americanheart.org/professional/StatementsGuidelines/ByTopic/TopicsA-C/ACCAHA-Joint-Guidelines_UCM_321694_Article.jsp)[-C/ACCAHA-Joint-Guidelines\_UCM\_321694\_Article.jsp](http://my.americanheart.org/professional/StatementsGuidelines/ByTopic/TopicsA-C/ACCAHA-Joint-Guidelines_UCM_321694_Article.jsp) |
| Canadian CardiovascularSociety consensus conference recommendations on heart failure 2006: Diagnosis andmanagement2012 Update | <http://www.chfn.ca/files/CCS%202006.pdf> [http://www.onlinecjc.ca/article/S0828-282X(12)01379-7/pdf](http://www.onlinecjc.ca/article/S0828-282X%2812%2901379-7/pdf)further updates also available with specific topics see:<http://www.chfn.ca/practice-guidelines> |
| 2009 FocusedUpdate: ACCF/AHA Guidelines for the Diagnosis and Management of Heart Failure in Adults | <http://circ.ahajournals.org/content/119/14/1977.full.pdf> |
| CanadianCardiovascular Society Atrial Fibrillation Guidelines 2010Focused 2014 Update of the Canadian Cardiovascular Society Atrial Fibrillation Guidelines | <http://www.ccsguidelineprograms.ca/index.php/afib/122-afib-guidelines>[http://www.onlinecjc.ca/article/S0828-282X(14)01249-5/pdf](http://www.onlinecjc.ca/article/S0828-282X%2814%2901249-5/pdf)- multiple resources here- look at 2010 guidelines and 2012 update Focused 2014 Update of the Canadian Cardiovascular Society Atrial Fibrillation Guidelines: Recommendations for Stroke Prevention and Rate/Rhythm Control. Be familiar with recent trials in AF re: rate and rhythm control and anticoagulatione.g. RE-LY, Athena, etc. (may want to look at original trial journal articles) |

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| Antithrombotic Therapy for AtrialFibrillation: Antithrombotic Therapy and Prevention of Thrombosis, 9th ed:American College ofChest Physicians Evidence-Based Clinical Practice Guidelines | <http://chestjournal.chestpubs.org/content/141/2_suppl>**see**Chest February 2012 141:2 suppl e531S-e575S; doi:10.1378/chest.11- 2304 |
| 2014 AHA/ACC/HRSGuideline for the Management of Patients with Atrial Fibrillation | [http://circ.ahajournals.org/content/130/23/e199.full.pdf+html](http://circ.ahajournals.org/content/130/23/e199.full.pdf%2Bhtml) |
| 2014 CHEPRecommendations for the Management of Hypertension | <https://www.hypertension.ca/en/chep> |
| 2014 Evidence-Based Guideline for the Management of High Blood Pressure in Adults (JNC 8) | <http://jama.jamanetwork.com/article.aspx?articleid=1791497> |
| 2012 Canadian CardiovascularSociety Guidelines for the Diagnosisand Treatment of Dyslipidemia for the Prevention ofCardiovascularDisease in the Adult | [http://www.onlinecjc.ca/article/S0828-282X(12)01510-3/pdf](http://www.onlinecjc.ca/article/S0828-282X%2812%2901510-3/pdf) |
| 2013 ACC/AHAGuideline on the Treatment of Blood Cholesterol to Reduce Atherosclerotic Cardiovascular Risk in Adults | <http://content.onlinejacc.org/article.aspx?articleid=1770217> |

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| ACC/AHA 2007Guidelines for the Management of Patients With Unstable Angina/Non–ST- Elevation Myocardial Infarction— Executive Summary andACC/AHA 2014Guidelines for NSTEMI ACS2011 update (focus on medications post- hospital discharge) | <http://content.onlinejacc.org/cgi/content/full/50/7/652><http://content.onlinejacc.org/cgi/content/full/j.jacc.2011.02.009> [http://circ.ahajournals.org/content/130/25/e344.full.pdf+html](http://circ.ahajournals.org/content/130/25/e344.full.pdf%2Bhtml) |
| ACC/AHA 2012Guideline for Management of STEMI | [http://circ.ahajournals.org/content/127/4/e362.full.pdf+html](http://circ.ahajournals.org/content/127/4/e362.full.pdf%2Bhtml) |
| 2012 ACC/AHA/ACPStable Ischemic Heart Disease Guideline | [http://circ.ahajournals.org/content/126/25/3097.full.pdf+html](http://circ.ahajournals.org/content/126/25/3097.full.pdf%2Bhtml) |
| AHA/ACCFSecondary Prevention and Risk Reduction Therapy for Patients With Coronary and Other Atherosclerotic Vascular Disease: 2011 Update | <http://my.americanheart.org/professional/General/Secondary-Prevention-Risk->Reduction-for-Cardiac-and-Vascular-Disease\_UCM\_432926\_Article.jsp |