

Pharmacy 406P Practice Experience II Manual

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Acknowledgment

The Pharmacy Practice Experience (PPE) program is an integral component of the course of study leading to the Doctor of Pharmacy degree at Memorial University of Newfoundland.

We appreciate the support of all the dedicated pharmacists who volunteer their time and share their knowledge and experiences by serving as preceptors in the program.

It is also acknowledged that while each student has a primary preceptor, they learn valuable information and skills from others at the site (e.g., other pharmacists and health professionals, pharmacy technicians, assistants) and we are grateful for your contribution.

Thank you!

We wish to acknowledge the College of Pharmacy, Dalhousie University for sharing material for this manual.

Our program materials continue to develop and evolve. We thank preceptors and students for their constructive feedback and invite you to continue to offer your comments and suggestions for improvement.

We hope that participation in the practice experience program is rewarding and enjoyable for all.

PPE Checklist

This checklist should be referred to at the beginning and during the PPE by the student and preceptor in order to ensure that the necessary items are covered. Check as the task is completed.

Before Starting the PPE

(v)

Student is registered with the licensing/regulatory body in the province in which they are completing PPE	
Student has provided preceptor with letter of introduction	

First Day

Student is introduced to pharmacy staff members, with a discussion of their roles	
Student is given a tour of the pharmacy which includes location of important areas, including:	
<ul style="list-style-type: none"> • Medication storage, and equipment and supplies, as applicable 	
<ul style="list-style-type: none"> • Pharmacy reference materials/resources 	
<ul style="list-style-type: none"> • Washroom/Lunch room/Coat storage 	
Preceptor discusses with student policies and procedures for:	
<ul style="list-style-type: none"> • Dress code 	
<ul style="list-style-type: none"> • Daily schedule, including breaks, lunch, etc. 	
<ul style="list-style-type: none"> • Telephone answering procedures 	
<ul style="list-style-type: none"> • Security within the pharmacy 	
<ul style="list-style-type: none"> • Confidentiality 	
<ul style="list-style-type: none"> • Internet access 	
<ul style="list-style-type: none"> • Any other pertinent topics 	
Student and preceptor review goals for the PPE program & establish a schedule for completing activities	

During PPE

Preceptor provides regular, ongoing feedback to student	
Student works on/discusses with the preceptor activities & questions in the manual	
Student and preceptor carry out documentation for activities & questions	

End of PPE

Student completes/submits required documentation within 2 days of conclusion of PPE <ul style="list-style-type: none"> • <i>Required Submissions</i> • <i>Student's Evaluation of the Preceptor & Site</i> • <i>Student's Evaluation of the PPE Program (Brightspace survey)</i> 	
Preceptor completes/submits required documentation <ul style="list-style-type: none"> • <i>Preceptor's Evaluation of the Student, including Attendance Certification</i> • <i>Preceptor's Evaluation of the PPE Program (Survey in CORE)</i> 	
Student and preceptor discuss student's performance	

Introduction

Educational Outcomes

The Association of the Faculties of Pharmacy in Canada (AFPC) sets the standards for pharmacy education. The goal is to graduate **Professionals** whose core role is to serve as **Care Providers** who use their medication therapy expertise to benefit patients, communities, and populations through the integration of **Communicator, Collaborator, Leader-Manager, Scholar** and **Health Advocate** roles. (See Figure 1.) The AFPC Educational Outcomes have been adopted by the School of Pharmacy and guide the curriculum and experiential learning in the program.

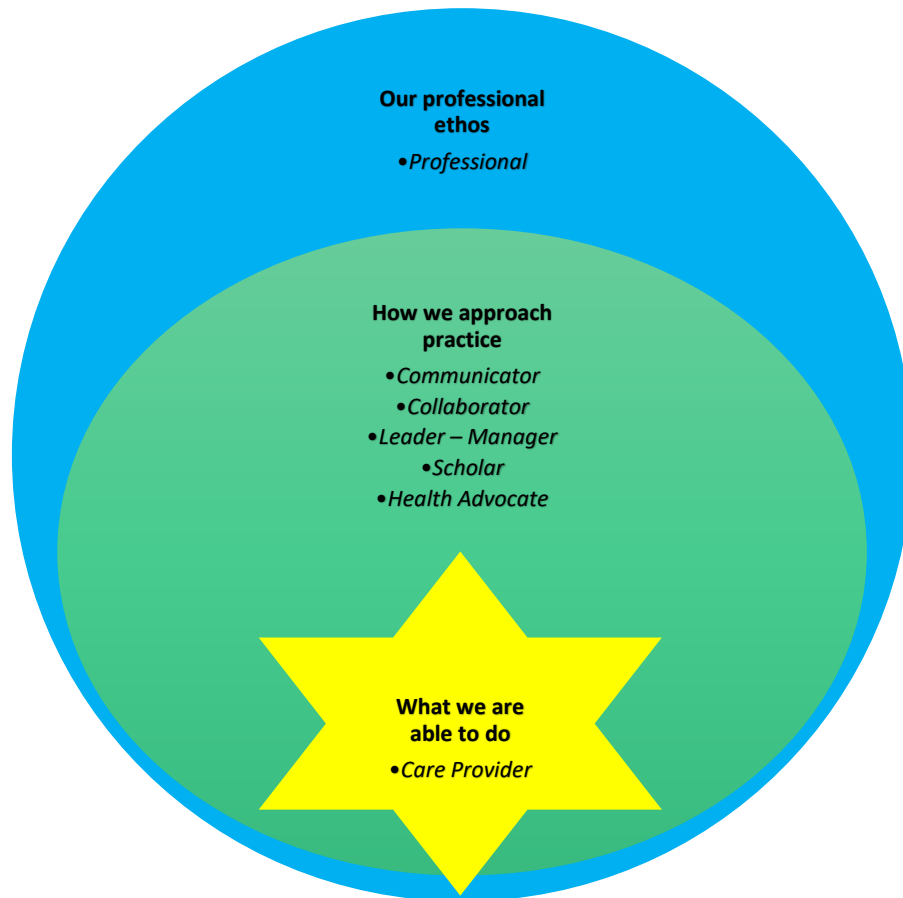


Figure 1. Conceptual framework for AFPC Educational Outcomes

The full document outlining the AFPC Educational Outcomes is available at http://afpc.info/system/files/public/AFPC-Educational%20Outcomes%202017_final%20Jun2017.pdf

Professional Competencies

The **National Association of Pharmacy Regulatory Authorities (NAPRA)** document, *Professional Competencies for Canadian Pharmacists at Entry to Practice* describes entry-to-practice requirements for initial licensing of pharmacists in Canada. The foundation for all competencies is provided through the knowledge, skills and attitudes gained during the completion of the pharmacy degree program. Logically, the NAPRA competencies and the AFPC Educational Outcomes for pharmacy graduates are closely aligned, as summarized in the table below.

Professional Competency (NAPRA)	Educational Outcome (AFPC)
Pharmacists...	Pharmacy graduates...
<i>Meet patients' health and drug-related needs</i> (in partnership with patient and collaboration with other health professionals)	<i>Provide patient-centered pharmacy care</i> by using their knowledge, skills and professional judgement to <i>facilitate management of a patient's medication and overall health needs</i>
<i>Communicate</i> effectively with patients, the pharmacy team, other health professionals and the public, providing education when required	<i>Communicate</i> effectively in lay and professional language, using a variety of strategies that take into account the situation, intended outcomes of the communication and diverse audiences
Work in <i>collaboration</i> with others to deliver services, make best use of resources and ensure continuity of care in order to achieve patients' health goals	<i>Work collaboratively</i> with patients and intra- and inter-professional teams to provide safe, effective, efficient health care
Ensure accurate <i>product distribution</i> that is safe and appropriate for the patient	Engage with others to <i>optimize the safety, effectiveness and efficiency of health care</i> and contribute to a vision of a high-quality health care system
<i>Oversee</i> the practice setting with the goal of ensuring safe, effective and efficient care	
Collaborate in developing, implementing and evaluating policies, procedures and activities that <i>promote quality and safety</i>	
Use their expertise to <i>advance the health and wellness</i> of patients, communities, and populations	Demonstrate care for individual patients, communities and populations by using pharmacy expertise to <i>understand health needs and advance health and well-being of others</i>
<i>Access, retrieve, critically analyze and apply relevant information</i> to make evidence-informed decisions in practice	Take responsibility for excellence by <i>applying medication therapy expertise, learning continuously, creating new knowledge and disseminating knowledge</i> when teaching others
Practise within legal requirements, demonstrate <i>professionalism</i> and uphold professional standards of practice, codes of ethics and policies	Deliver pharmacy care to patients, communities and society through <i>ethical practice and the high standards of behavior</i> that are expected of self-regulated professionals

¹ Competencies

Job-related knowledge, skills, abilities, attitudes and judgements required for competent performance by members of a profession (as defined in NAPRA document, *Professional Competencies for Canadian Pharmacists at Entry to Practice*, March 2014, http://napra.ca/sites/default/files/2017-08/Comp_for_Cdn_PHARMACISTS_at_EntrytoPractice_March2014_b.pdf)

Pharmacy Practice Experience II

The primary objective of the practice experience program is to learn from experience while under the supervision of a pharmacist preceptor.

Pharmacy Practice Experience (PPE) II consists of a 2-week placement (80 hours) in a hospital pharmacy setting and takes place after the third year of the entry-to-practice Pharm. D. program.

During PPE II, students will be introduced to the operations of a hospital pharmacy with a focus on drug distribution, safe medication use practices, and policies and procedures relevant to the provision of pharmacy services in an institutional setting. Students will have opportunities to communicate with many individuals which may include peers, pharmacy colleagues, other health professionals, patients, and various other people within the organization.

Participation in standard hospital pharmacy processes and completion of assignments/reflections will enable students to meet the intended learning objectives of the rotation. Effective communication skills, professionalism, and teamwork are expected.

Students and preceptors are referred to the [*PPE Program Handbook*](#) for information about the practice experience program structure, administration, and policies.

Using the Pharmacy Practice Experience Manual

The PPE II manual consists of four sections, each containing specific tasks and assignments to be fulfilled by the student to help the student develop knowledge and skills in the key competency areas; and to enable the preceptor to assess the student's level of proficiency and competency in each area. **The activities may be completed in any order.**

The preceptor will work with the student on the activities in the manual, though the **student is expected to demonstrate initiative** in ensuring that assigned tasks are completed.

Assignments cannot address all the competencies needed to practise pharmacy in a particular setting and the preceptor and student may have additional ideas for useful activities to maximize the student's experience. Students should indicate to their preceptors any areas in which they have had previous experience and also areas in which they may need particular help.

While each student has a primary preceptor, s/he may learn valuable information and skills from others at the site. Throughout the manual, the statement, "*Discuss with your preceptor...*" may be interpreted as, "*Discuss with your preceptor or a designated alternative person...*" (e.g., another pharmacist, technician, other health professional, etc.).

In general, students' answers to questions are not required to be submitted to the School of Pharmacy for grading. In completing the various activities, the student may document (confidentially) relevant notes, observations and responses to questions in the manual and review them with the preceptor. **Student reflections or assignments that are required to be submitted to the School are clearly identified.**

All student submissions are **DUE within TWO (2) days of concluding the PPE.**

Evaluation

Pharmacy Practice Experience II is an academic course and must be successfully completed in order to enter the next year of pharmacy study and to graduate from the School of Pharmacy.

Overall evaluation of the PPE will result in a grade of **Pass or Fail**. The final grade will be determined by the **PPE Evaluation Committee** of the School of Pharmacy.

A passing grade for PPE II is contingent upon:

- Ability of the student to **meet the required competencies**, as assessed by the **preceptor** using the evaluation tools supplied by the School.
 - The competency of **professionalism**, in addition to being assessed by the preceptor using the *Preceptor's Evaluation of Student* form, includes professional behavior as demonstrated by adherence to:
 - *School of Pharmacy's Code of Professional Conduct for Pharmacy Students, Pledge of Professionalism, Professional Attire Guidelines, and Student Guidelines and Best Practices when Communicating Online*
 - *Memorial's Student Code of Conduct*
 - *Standards, Guidelines and Policies governing the Practice of Pharmacy* (i.e., as established by the provincial regulatory body)
 - adherence to relevant site policies.
- Satisfactory **completion of activities and questions**, as determined by preceptor's evaluation and/or submission of materials to the School.
- Satisfactory **attendance** record.

Students who conduct themselves in such a manner as to **cause their termination** from the PPE site will be assigned a grade of **Fail** for the rotation.

Section 1: Professional and Ethical Practice

Objectives

The student is expected to:	AFPC Roles*
<ul style="list-style-type: none"> • Exhibit professional behavior, which includes: <ul style="list-style-type: none"> • treating others with courtesy and respect, • maintaining privacy and confidentiality, • maintaining a professional image and demeanor, including maintaining composure in difficult situations, • maintaining appropriate professional boundaries, • accepting responsibility for actions and decisions. 	CM; PR
<ul style="list-style-type: none"> • Adhere to high ethical standards in practice. 	PR
<ul style="list-style-type: none"> • Adhere to the laws and regulations that govern the profession of pharmacy. 	PR
<ul style="list-style-type: none"> • Demonstrate self-awareness and commitment to meeting learning needs in the management of continuing personal and professional development. 	LM; PR

*CM: Communicator; LM: Leader-Manager; PR: Professional

Resources

- [NLPB Code of Ethics](#)
- [Personal Health Information Act](#)
- [Canadian Society of Hospital Pharmacists Position Statements](#)

Activities & Questions

- 1.1 Discuss with the preceptor policies and procedures regarding **patient confidentiality**. Consider actions that may represent a privacy breach (e.g., accessing one's own or a relative's health record when the information is not required to do your job; disclosing patient information to others who do not need to know for direct patient care, intentionally or non-intentionally). What precautions should be taken to protect patient confidentiality when discussing patient situations and completing required activities (reviewing medication profiles and/or medication orders) during the PPE?

- 1.2 **CSHP Position Statements** express the stance of the Society on issues related to the practice of pharmacy in healthcare organizations including desired levels of performance.
 - a. Review the following CSHP position statements:
 - i) Cannabis for the Hospitalized Patient
<https://www.cshp.ca/docs/pdfs/Cannabis%20for%20the%20Hospitalized%20Patient%20Position%20Statement%20Final.pdf>

 - ii) Medical Assistance in Dying,
https://www.cshp.ca/docs/pdfs/Medical%20Assistance%20in%20Dying_Position%20Statement_2017_ENGLISH_2.pdf

iii) National Pharmacare,

[https://www.cshp.ca/docs/pdfs/National%20Pharmacare Position%20Statement 2017 EN.pdf](https://www.cshp.ca/docs/pdfs/National%20Pharmacare%20Position%20Statement%202017%20EN.pdf)

- b. Participate in a *Discussion Board*** expressing your view on at least one of the above topics (i.e., whether you agree with the statement, partially agree, or disagree). Support your response(s) by referring to the pharmacist's *Code of Ethics* and the ethical principles of *autonomy, beneficence, non-maleficence, and justice*.

Discussion Board: This is a closed-group discussion platform for students enrolled in Pharmacy 406P and may be accessed in the Pharmacy Practice Experiences Brightspace.

General guidelines for participation:

Your discussion of these topics is expected to be respectful.

Please refer to Netiquette Rules <http://www.albion.com/netiquette/corerules.html>.

Differing viewpoints are expected and students are encouraged to discuss and challenge each other's ideas. However, unprofessional and inappropriate comments are to be avoided. Your writing must be formal (i.e., appropriate grammar, spelling, etc.) and model the high standards of professional dialogue expected of student pharmacists. Slang, abbreviations, and emoticons are not appropriate. Postings that do not adhere to professional standards will be removed and the student will be responsible for providing an appropriate replacement to meet course requirements.

Activity & Question Checklist, including Competencies Met

	Student Check-off (✓)	Key or Enabling Competencies	Note whether any Activities were UNABLE to be Completed at the Site (and reason)
1.1		CM1.7; PR 1.1, PR2.3	
1.2	a.	CM1.3, 1.4, CM2.1; LM3; PR1, PR2.3	
	b.		

Section 2: Practice Setting and Product Distribution

Objectives

The student is expected to:	AFPC Roles*
<ul style="list-style-type: none"> Know and comply with the legislation, standards, and policies which apply specifically to the operation of a hospital pharmacy. 	PR
<ul style="list-style-type: none"> Demonstrate a knowledge of the drug distribution process followed in a hospital pharmacy by observing and/or taking part in drug distribution services. This may involve: solving pharmacy calculation problems and compounding, including the preparation of sterile products; safe handling of hazardous products. 	CP; CM; CL; LM; SC; PR
<ul style="list-style-type: none"> Establish professional working relationships, which includes sharing information and determining to whom to go for relevant information. 	CM; CL
<ul style="list-style-type: none"> In collaboration with other team members, interpret a new medication order and, considering the patient's profile, discuss the process for resolving questions or issues. 	CP
<ul style="list-style-type: none"> Show initiative and demonstrate diligence, timeliness, reliability, and accountability in ensuring assigned tasks are completed. 	LM; PR
<ul style="list-style-type: none"> Demonstrate organizational and time management skills in the practice setting. 	LM
<ul style="list-style-type: none"> Incorporate constructive feedback to improve performance. 	PR

*CP: Care Provider; CM: Communicator; CL: Collaborator; LM: Leader-Manager; SC: Scholar; PR: Professional

Resources

- NLPB [Standards of Pharmacy Operation - Hospital Pharmacy](#)
- NAPRA [Model Standards for Pharmacy Compounding of Non-Sterile Preparations](#)
 - [Guidance Document for Pharmacy Compounding of Non-Sterile Preparations](#)
- NAPRA Model Standards for Pharmacy Compounding of Sterile Preparations
 - [Standards for Pharmacy Compounding of Hazardous Sterile Preparations](#)
 - [Standards for Pharmacy Compounding of Non-Hazardous Sterile Preparations](#)
 - NLPB [Implementation Plan for Sterile Compounding Standards](#)
 - NLPB [Sterile Compounding Self-Assessment](#)
- CSHP Official Publications
 - [Drug Distribution: Statement on Unit Dose & IV Admixture](#)
- Pharmacy Legislation, <http://www.nlpb.ca/pharmacy-practice/legislation/>

Activities & Questions

Product Distribution and Workflow Process

- 2.1** Gain knowledge of the steps that are followed at your practice site from the initial ordering of a medication through to the administration of the medication to the patient.
The following may help guide your learning:

a. Medication Ordering

- Who may prescribe within the hospital (physicians, interns, residents, nurse practitioners, midwives, pharmacists, etc.)? Who among these may issue prescriptions which are valid outside the hospital?
- What is the policy regarding verbal orders?
- Where and how are medication orders written?
- Are brand or generic drug names used?
- What abbreviations are acceptable?
Activity: Interpret a minimum of **five** medication orders.
- How do medication orders reach the pharmacy?
- Who enters (processes) medication orders in the hospital information system? Who checks them for accuracy?
- How are orders for controlled substances processed?
- What policies and standards exist relating to assignment of duties in the pharmacy department?
- What information must the patient record contain? How, and by whom, is patient profile information used in the dispensing and checking process?
Activity:
 - i. Observe the order entry process.
 - ii. Enter a minimum of **five** medication orders to be verified by a pharmacist.
- What process is followed if errors, duplications, allergies, or other situations arise that require clarification of an order?
Activity: Discuss with your preceptor the process for reviewing a new medication order, the patient's profile, and resolving any questions/problems. The preceptor is encouraged to demonstrate this process by reviewing with the student new medication orders for a minimum of **two** different patients.
- What type of clinical decision support tools or resources are available to the pharmacist?

b. Repackaging of Medications

- Who has access to medication storage areas?
- Who fills the orders and who checks them for accuracy?
Activities:
 - i. Observe the repackaging of various dosage forms (oral tablets, oral capsules, oral powders, oral liquids, topical ointments/creams/gels, suppositories/inserts, and narcotics).
 - ii. Review a repackaging record and note the information included.
 - iii. *If possible*, participate in repackaging of medications.

c. Medication Preparation - Non-Sterile Compounding ('Bulk Compounding')

- Who prepares non-sterile compounds? Refer to site policies and procedures for the preparation of **non-sterile products**.
Activities:
 - i. List **three** products that are compounded at your site, where applicable.
 - ii. Review a master formula for the information it contains.
 - iii. Review a production record and note the information included.
 - iv. *If possible*, compound at least **one** bulk product from a master formula. Document the batch in a production record and properly label it.

d. Sterile Product Preparation

Model Standards for Pharmacy Compounding of Sterile Preparations

Background: The National Association of Pharmacy Regulatory Authorities (NAPRA) has developed standards for pharmacy compounding of both hazardous and non-hazardous sterile products and the NL Pharmacy Board has adopted these standards. This is in response to evolving practice, as well as increased awareness of the risks of compounding sterile preparations on the health of both patients and compounding personnel.

The standards are intended to better protect the safety of patients and personnel involved in sterile compounding, and to promote consistency in the provision of this service. Full implementation for pharmacies and pharmacy professionals currently involved in sterile compounding has required one or more of the following: developing/revising policies and procedures; appropriately training compounding and cleaning personnel; upgrading equipment and facilities; and developing quality assurance programs.

- Who prepares sterile medications? What type of education/training must staff complete before they are able to compound sterile products? Refer to site policies and procedures for the preparation of **sterile products**.
- What facilities, equipment, and garb are available for sterile product preparation?
- What is the process for preparing to enter the “clean room” in terms of clothing and scrubbing?
- What types of hoods and air filtration are used in the room?
 - Activities:**
 - i. Observe sterile products being prepared. Ask what risk level is assigned to each procedure.
 - ii. List **three** sterile products that are compounded at your site. Note the following: expiry date determination, labeling requirements, record keeping, validation and end product testing.
 - iii. Work out the calculations required to properly prepare them for at least **two** sterile products.
 - iv. *Where possible*, compound at least **one** sterile product (e.g., IV minibag, eyedrops). This should be **for practice only, not for patient administration.** (Suggestion: Use outdated product or inactive ingredients for this purpose). Document the process and label the product in accordance with guidelines.
 - v. Arrange to meet with the compounding supervisor (or designated person) at your site and discuss measures which have been implemented to meet the *NAPRA Model Standards for Pharmacy Compounding of Sterile Preparations*. What resources, including time and personnel, are required to implement them? **Select a specific standard** (i.e., amongst 5.1-5.3; 6; 7, in non-hazardous sterile prep standards) **and describe how the process(es) you observed and/or practised reflect these standards.**

Submit a reflection in Brightspace for activity (v). Be sure to touch on all three points i) specific standard with examples, ii) implemented measures, iii) resources (education, training, physical facility requirements) in your reflection.

e. Hospital Formulary & Automatic Substitution

- What is the rationale for an automatic substitution policy?
- How are medications added to the formulary?
- What is the role of the Pharmacy and Therapeutics committee?
- Does the formulary contain guidelines, treatment algorithms or additional tools that can assist with making appropriate decisions by health professionals?

f. Medication Distribution and Administration

- What are the regulations and procedures for storing medications, including controlled substances, within the pharmacy?
- What types of medication distribution systems does your site use (e.g., unit dose, controlled dosage, individual patient prescription, ward stock, and patient self-administration)?
- What are the advantages and disadvantages of each type of medication distribution?
- Why does CSHP endorse the Unit-Dose/Intravenous (I.V.) Admixture system as the drug distribution system of choice in organized health care settings in Canada?
- What do the *NLPB Standards of Pharmacy Operation - Hospital Pharmacy* say about the types of drug distribution systems that must be used?
- What is the process for filling orders for non-formulary, sample, investigational, emergency release, and patient-owned medications?
- What is the process for filling stat drug orders?
- What is the importance of stop orders? Which medications are given stop orders at your site?
- What information is required on a medication label?
Activity: Review **one** medication label in reference to the requirements outlined in *NLPB Standards of Pharmacy Operation - Hospital Pharmacy* (Section 3.4)
- How are medications delivered within your site? Are all medications delivered the same way (narcotics, chemotherapy, TPN, etc.)?
Activity: *If possible*, accompany staff on a delivery on at least **one** occasion.
- What steps are involved in medication administration including medication administration record (MAR) documentation?
- Is there a standard format for dose timing? What times are medications scheduled as follows administered: daily, b.i.d., q.12 h., t.i.d., q.8 h., t.i.d. with food, nightly, warfarin?
- What is the procedure for dispensing narcotic drugs to nursing units? How are narcotic audits conducted in the pharmacy and on nursing units? What is the process for resolving discrepancies in narcotic counts?
- How are medications returned to the pharmacy? Discuss with your preceptor the policies and procedures for restocking or disposing of returned medications.

Department Administration and Provision of Pharmacy Services

If possible, arrange to meet with the Director of Pharmacy, or a manager or supervisor, to discuss the following issues:

- 2.2 a.** Describe the pharmacy department’s organizational structure (e.g., define the relationships and lines of communication within the service, to other hospital departments, and throughout the organization). Determine what hospital committees have pharmacy representation.
- b.** What type of information is included in the pharmacy’s policy and procedure manual? How are pharmacy staff familiarized with its contents?
- c.** What are the hours of pharmacy services? What considerations/factors determine these hours? What provisions are made to ensure that urgently needed drugs and pharmacy services are available outside these hours?

Activity & Question Checklist, including Competencies Met

	Student Check-off (√)	Key or Enabling Competencies	Note whether any Activities were UNABLE to be Completed at the Site (and reason)
2.1	a.	CP1.1, 1.2, CP2.1, 2.2, 2.4.4 a & b, CP3.1; CM1, CM2.1, 2.2; CL1.1, 1.2; LM1.1, 1.2, LM4.2; SC1; PR1.1, 1.4, PR2.1, 2.2, 2.3, 2.4, 2.5; PR3.1	
	b.		
	c.		
	d.		
	e.		
	f.		
2.2	a.	LM	
	b.		
	c.		

Section 3: Safe Medication Use

Objectives

The student is expected to:	AFPC Roles*
<ul style="list-style-type: none"> Recognize potential harm from health care delivery, including patient safety incidents. 	CP
<ul style="list-style-type: none"> Demonstrate a commitment to patient safety and quality improvement by learning about and adopting strategies that promote patient safety. 	CP; CM; LM; SC; PR
<ul style="list-style-type: none"> Describe how technology and automation supports a safe medication use process. 	LM; PR
<ul style="list-style-type: none"> Show a commitment to the promotion of public good in health care (e.g., handle hazardous products safely to minimize personal exposure; support policies and procedures that protect the safety of patients and pharmacy personnel, including standards for pharmacy compounding and infection control policies). 	HA; PR

*CP: Care Provider; CM: Communicator; LM: Leader-Manager; HA: Health Advocate; SC: Scholar; PR: Professional

Resources

- [Institute for Safe Medication Practices Canada](#) website
- [Canadian Patient Safety Institute -Vanessa’s Law](#)
- [Health Canada, Adverse Reaction and Medical Device Problem Reporting](#)
- [Informatics for Pharmacy Students e-Resource](#)

Safe Medication Practices

Hospital pharmacists play an essential role in ensuring that patients receive safe, quality care. Pharmacists oversee medication distribution within healthcare facilities and work to ensure that systems and processes are sound, reliable and designed to minimize the occurrence of errors. Working with other healthcare professionals, pharmacists also ensure that appropriate prescribing decisions are made, patient outcomes are monitored, and adverse drug events are prevented and/or appropriately managed. Pharmacists further help improve the quality and safety of medication use by providing patient education and services such as medication reconciliation.

(Adapted from: Canadian Society of Hospital Pharmacists. Hospital Pharmacists: Information Paper on Enhancing Quality and Safety in Medication Use. Ottawa (ON): Canadian Society of Hospital Pharmacists; 2010.)

- 3.1** Refer to *The Institute for Safe Medication Practices (ISMP) Canada* website.
- a. Review the “**Definitions**” section to aid in your understanding of the terminology used in the context of medication incident reporting and prevention, <https://www.ismp-canada.org/definitions.htm>.
 - b. Under *Dangerous Abbreviations, Symbols and Dose Designations* review the safety bulletin and the list of “**Do Not Use**” [abbreviations](#)
 - Are there others that that **your site** has identified besides those in the list published by ISMP?
 - How is this type of information shared with all involved team members, including prescribers?

- What on-site policies exist regarding problematic abbreviations and dose designations?
 - Activity:** Examine/peruse/scan medication orders for use of dangerous abbreviations. What does the pharmacist (or technician) do when an order is received that contains one of these abbreviations or symbols?

- c. Review ISMP's list of *High-Alert Medications*, <http://www.ismp.org/Tools/highalertmedications.pdf>.
 - What safeguards are in place at the practice site to reduce the risk of errors with some of these drugs?
 - Activity:** Identify and describe **one (1)** protocol for a high risk injectable or oral medication. What particular strategies (limited access, labelling, alerts) are used to reduce the risk of errors and minimize harm with this medication?

Serious Adverse Drug Reactions (ADRs) and Medical Device Incidents (MDIs) Reporting

*Serious adverse drug reactions (ADRs) and medical device incidents (MDIs) to therapeutic products must be reported to the Canada Vigilance Program of the Marketed Health Products Directorate (MHPD) of Health Canada. The **Protecting Canadians from Unsafe Drugs Act**, also known as **Vanessa's Law**, is intended to increase drug and medical device safety in Canada by strengthening Health Canada's ability to collect information and to take quick and appropriate action when a serious health risk is identified.*

- 3.2 a.** Review the educational material related to the reporting of **serious ADRs and MDIs** on the Canadian Patient Safety Institute website. Complete as self-study the four Power Point [modules](#):
- [Module 1 – Overview of Vanessa's Law and Reporting Requirements](#)
 - [Module 2 – Reporting Processes to Health Canada](#)
 - [Module 3 – Strategies to Promote and Support Mandatory Reporting](#)
 - [Module 4 – Health Canada's Review and Communication of Safety Findings](#)

After completing the modules you should be able to answer the following questions:

- Who was Vanessa? What is the purpose of Vanessa's Law?
- What are the definitions of a serious ADR and MDI?
- Why is mandatory reporting of serious ADRs and MDIs important?
- Who is required to report?
- What products are in scope of these regulations?
- Within what time period must hospitals report in writing serious ADRs and MDIs to Health Canada?
- What are the required data elements for mandatory reporting of serious ADRs and MDIs?
- By what methods can serious ADR and MDI reports be submitted?
- What type of information is contained within the Guidance Document?
- By what methods does Health Canada communicate safety findings?

- b. Discuss with the preceptor the following points related to **serious ADRs and MDIs** reporting:
- What are some possible barriers to reporting?
 - In what way is serious ADR and MDI documentation and reporting promoted by the practice site? Is serious ADR and MDI documentation and reporting included in orientation or education programs?
 - What type of operational strategies, including technology and workflow integration, have been implemented to support serious ADR and MDI documentation and reporting?
 - What specifically is happening in NL (provincially) in terms of a strategy for implementing the mandatory reporting requirements?
- c. Differentiate between **serious ADRs, MDIs, medication incidents, adverse reactions (ARs)**, and **medical device problems (MDPs)**. It is important to understand the **differences** in how to report these. Health Canada values *voluntary* reporting of ARs and MDPs and has programs to support it.
- i) Discuss with your preceptor how **adverse reactions (ARs)** are detected, reported and prevented at your site. Access the tools available through Health Canada's Vigilance Program (<http://www.hc-sc.gc.ca/dhp-mps/medeff/vigilance-eng.php>).
- Activity:** If possible, assist a pharmacist with the reporting of an AR or learn about an AR that was recently reported to Health Canada.
- ii) **Medication incident** reporting occurs through a separate program. *Refer to the ISMP Medication Incident and Near Miss Reporting Program*, http://www.ismp-canada.org/err_index.htm
- Discuss with your preceptor a medication incident or discrepancy that may have occurred in the past or during your rotation. What factors may have contributed to the incident? Were any system changes implemented as a result?
 - Discuss the strategies your site has in place to prevent medication incidents.
 - View the ISMP *Report a Medication Incident Form*, noting the specific information requested.
 - Consider the merits of a non-punitive, voluntary approach to medication error reporting.
- 3.3 a.** Refer to *Informatics for Pharmacy Students e-resource*, <http://elearnhpc.ca/>, **Module 16, Automation for Safety in Medication Distribution**. Complete Sections 1 - 6 (Section 4 optional); the **Quiz: Automation for Safety in Medication Distribution**; and print/ take a screen shot of the Certificate of Completion: Automation for Safety in Medication Distribution. **Submit a copy of the certificate in Brightspace.**
- b. Discuss with the preceptor:
- i) What automation and technology systems are used at the practice site to support safe medication distribution and use processes (e.g., bar-coding, scanning devices, automated packagers, dispensing cabinets, compounding devices)? Become familiar with available systems at your site.
- ii) Does your site use computerized prescriber order entry?
- iii) How is data available from health informatics (e.g., HEALTHe NL) used in optimizing patient care?

3.4 Review the infection control policies and procedures that must be followed by all health care staff at the hospital site. Reflect on how the health screening you underwent prior to your placement contributes to the maintenance of a healthy environment for the public.

Activity & Question Checklist, including Competencies Met

	Student Check-off (√)	Key or Enabling Competencies	Note whether any Activities were UNABLE to be Completed at the Site (and reason)
3.1	a.	CP3.1, 3.2; LM1.1, 1.2; SC1; PR1.4, PR2.2, 2.5	
	b.		
	c.		
3.2	a.	CP3.1, 3.2; CM1.7; LM1.1, 1.2; SC1; PR1.4, PR2.2, 2.5	
	b.		
	c. i) ii)		
3.3	a.	CP3.1, 3.2; LM1.2, 1.4; SC1; PR1.4, PR2.2, 2.5	
	b. i) ii) iii)		
3.4		HA2.2; PR1.4	

Section 4: Communication, Collaboration, and Education

Objectives

The student is expected to:	AFPC Roles*
• Effectively interact with members of the health team, including pharmacy colleagues and other professionals.	CM; CL
• Demonstrate effective oral, non-verbal, and written communication skills, including listening skills.	CM
• Engage in respectful, compassionate, non-judgmental, culturally safe, tactful conversations with others.	CM; CL; PR
• Demonstrate leadership abilities, as appropriate; appropriately seek guidance when unsure of own knowledge or abilities.	CM; CL; LM; PR
• Acknowledge and respect the roles, responsibilities, and competencies of all team members and other health care providers.	LM; PR
• Demonstrate understanding of core knowledge covered to date.	CP; SC
• Provide accurate and appropriate education/drug information to others, as required.	CP; CM; SC
• Use a systematic approach in the search for drug information; incorporate best available evidence in responding to drug information questions.	SC
• Appropriately document activities as they are encountered during the rotation (e.g., response to drug information question).	CM
• Receive and respond respectfully to feedback from others.	CM; PR

*CP: Care Provider; CM: Communicator; CL: Collaborator; LM: Leader-Manager; SC: Scholar; PR: Professional

Resources

- [Institute for Safe Medication Practices \(ISMP\) Canada Medication Reconciliation](#)
- Best Possible Medication History Interview Guide, https://www.ismp-canada.org/download/MedRec/SHN_medcard_09_EN.pdf
- *Pharmacy Management, Leadership, Marketing, and Finance*, 2nd edition, 2014. Chapter 2: Leadership Essentials for Pharmacists, http://samples.jbpub.com/9781449660284/57253_CH02_SECURE.pdf
- CliftonStrengths, <https://www.gallupstrengthscenter.com/home/en-us>

Activities & Questions

- 4.1 Reflect on how members of the pharmacy team collaborate intra-professionally and inter-professionally to optimize the safe and effective distribution of medications.
- 4.2 *If possible, shadow a clinical pharmacist.* Note the following:
 - How does the health care team interact and collaborate to provide care to patients?
 - What is the role of the pharmacist within the team?
- 4.3 Hospital pharmacy practice includes many pharmacy team members who have varying roles. Each role requires its own strengths and leadership abilities for the individual to be successful in that role and to contribute to the effective functioning of the team. **Complete a) and b) on the next page and submit your observations in Brightspace.**

- a. i) Consider the various roles of pharmacy team members within the department (e.g., director, manager, clinical pharmacist, pharmacy technician, etc.). Choose **three** different roles and briefly describe something unique about the main responsibilities of that role.
- ii) For the three roles you chose above, note particular **strengths or leadership abilities** you observed demonstrated by, or which are looked-for in, individuals in these roles.
- b. **Comment** on how your own personal strengths and leadership style influence your interactions within the pharmacy team.
- c. Capturing your professional experience and communicating it in a professionally appropriate manner is a way to demonstrate leadership. It is suggested you update your resume or professional profile (e.g., LinkedIn) with this practice experience and any other appropriate professional activities you engaged in.

4.4 Discuss with your preceptor drug information resources, including any paper files or other supplementary resources that your site has. Compare and contrast these with those generally accessed at the School of Pharmacy.

Activity: Answer a minimum of **one** drug information question of your choice and agreed upon by your preceptor (preferably regarding drug interactions, IV compatibility, or stability). **Document using the *Student Drug Information Request Documentation Form* and submit to your preceptor for feedback.**

References must be cited appropriately. See MUN Libraries, Guidelines for Citing Resources <http://guides.library.mun.ca/content.php?pid=240311&sid=5622001>

Medication Reconciliation

Medication Reconciliation is the process of creating the most accurate list possible of all medications a patient is taking and comparing that list against admission, transfer, or discharge orders, with the goal of providing correct medications to the patient as s/he makes transitions within the healthcare system.

*The **Best Possible Medication History (BPMH)** consists of an accurate list of all medications a patient takes at home and is a vital step in the medication reconciliation process.*

- 4.5. a.** Is there a medication reconciliation program at your rotation site? What is the role of the pharmacist, pharmacy staff, and other healthcare providers in medication reconciliation at your site? How many different professions are involved in the process?
- b. Refer to ISMP Canada's website, Medication Reconciliation.** Review the Best Possible Medication History Interview Guide which provides a standardized approach for the collection of a comprehensive and accurate BPMH. Who at the site is trained to complete a BPMH?

Activity: *If possible, participate* in medication reconciliation by arranging to complete (under guidance of another health care professional) a BPMH at admission, transfer, or discharge. Note the tools or forms that are used to collect BPMHs. How is information technology used to facilitate the process?

Alternatively, arrange to observe a health care professional completing a BPMH at admission, transfer or discharge, noting the tools and technology used as above.

Activity & Question Checklist, including Competencies Met

	Student Check-off (√)	Key or Enabling Competencies	Note whether any Activities were UNABLE to be Completed at the Site (and reason)
4.1		CL1.2	
4.2		CL1.1, 1.2	
4.3	a.	CL1.2; LM3; PR3.2	
	b.		
	c.		
4.4		CP1.1, 1.2; CM1; SC1, SC2	
4.5	a.	CP1.2, CP2.1, CP3; CM1.1, 1.4, 1.5, 1.6; CM2; CL1; LM1.2, 1.4; SC1; PR1.1, 1.4, PR2.2	
	b.		

Appendix: Program of Study

Course descriptions: <https://www.mun.ca/regoff/calendar/sectionNo=PHAR-0462>

Term	Required Courses
Pre-Pharmacy	Courses required for admission
Pharmacy Year 1	
Fall Year 1	CHEM 2400 Introductory Organic Chemistry I PHAR 2002 Anatomy and Physiology I PHAR 2201 Pharmaceutics I PHAR 2250 Pharmacy Practice I PHAR 2610 Health Systems
Winter Year 1	CHEM 2401 Introductory Organic Chemistry II PHAR 2003 Anatomy and Physiology II PHAR 2004 Introduction to Biochemistry PHAR 2202 Pharmaceutics II PHAR 2251 Pharmacy Practice II PHAR 2620 Social and Ethical Behaviour
Fall/Winter/Spring Year 1	PHAR 2010 Service Learning
Pharmacy Year 2	
Fall Year 2	PHAR 3111 General Biochemistry PHAR 3250 Pharmacy Practice III PHAR 3270 Pharmacotherapy I PHAR 3801 Pathophysiology I PHAR 3805 Pharmacology I
Winter Year 2	PHAR 3006 Immunology PHAR 3251 Pharmacy Practice IV PHAR 3271 Pharmacotherapy II PHAR 3410 Leadership and Health Promotion PHAR 3810 Microbiology of Infectious Diseases PHAR 3825 Medicinal Chemistry
Spring Year 2	PHAR 305P (PPE I): Community Pharmacy (6 weeks)
Pharmacy Year 3	
Fall Year 3	PHAR 4250 Pharmacy Practice V PHAR 4270 Pharmacotherapy III PHAR 4621 Applied Health Research I PHAR 4802 Pathophysiology II PHAR 4810 Pharmacology II PHAR 4860 Pharmacogenomics and Biotechnology
Winter Year 3	PHAR 4251 Pharmacy Practice VI PHAR 4271 Pharmacotherapy IV PHAR 4420 Pharmacy Management I PHAR 4622 Applied Health Research II PHAR 4820 Pharmacokinetics
Spring Year 3 (Current)	PHAR 406P (PPE II): Hospital Dispensary (2 weeks) PHAR 407P (PPE III): Pharmacy Direct Care (4 weeks)

Pharmacy Year 4	
Fall Year 4	PHAR 5250 Pharmacy Practice VII PHAR 5270 Pharmacotherapy V PHAR 5430 Pharmacy Management II PHAR 5815 Pharmacology III PHAR 5830 Applied Pharmacokinetics
Winter Year 4	PHAR 5251 Pharmacy Practice VIII PHAR 5271 Advanced Pharmacotherapy PHAR 5275 Symposium in Pharmacy PHAR 5640 Social Justice and the Pharmacist PHAR 508P PPE IV: Hospital Pre-APPE (2 weeks)
Pharmacy Year 5	
Spring/Summer, Fall, Winter Year 5 From May (immediately following Winter Year 4) until April of the following year	Advanced Pharmacy Practice Experiences (APPE) PHAR 605P : Direct Patient Care (8 weeks) PHAR 606P : Acute Care Hospital (8 weeks) PHAR 607P : Community Pharmacy (8 weeks) PHAR 608P : Elective (6 weeks)

<https://www.mun.ca/pharmacy/programs/pharmd/pharmdprogramofstudy.php>