



**UNIVERSITY
OF ALBERTA**

PHARM 454 – Introductory Pharmacy Practice Experience Part 2

Spring/Summer, 2023

Acute Care Hospital Practice Placement

Course weight: *4

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COURSE DESCRIPTION

This 4-week structured practical learning experience introduces acute care practice and allows students to integrate knowledge and skills to provide patient care under the supervision of a pharmacist, normally in a hospital setting. This course maximizes pharmacist roles including communication, collaboration, practice management, evidence-based practice, and professional responsibilities in an acute care setting.

Course Prerequisite: Pharm 354, meet all experiential education requirements.

STUDENT REQUIRED READINGS (to be completed prior to placement starting)

See eClass for [Required Readings](#) that pertain to all Introductory Pharmacy Practice Experiences (IPPEs). **See additions with Resources for Covid-19 – this is some required information for your review prior to placement, and will be updated as needed.** Students were expected to review these readings prior to Pharm 354 (community practice experience after year 1) and re-review as needed to support learning. For detailed information on course requirements and policies/procedures, students must review the [Undergraduate Experiential Education Policies and Procedures Manual](#).

STUDENT RECOMMENDED RESOURCES

See eClass for [Recommended Resources](#). Prior to the placement students should ask their preceptor about resources that should be brought to the placement or pre-readings that should be completed prior to the placement.

COURSE OUTCOMES

This course is designed to develop the following knowledge, skills and attitudes. Given the pandemic, some outcomes may be emphasized more than others to account for practice situations.

1. Demonstrate fundamental knowledge and critical thinking to care for patients.
2. Identify factors for safe and efficient medication distribution.
3. Demonstrate effective verbal and non-verbal communication skills with patients, team members and pharmacy colleagues.
4. Communicate effectively in writing (written activities, assignments, documentation notes).
5. Provide patient care using the Patient Care Process with focus on patients with conditions covered in years 1 and 2.
6. Work effectively with members of the team.
7. Integrate best available evidence into patient care decisions.
8. Participate in site-based advocacy activities such as health promotion and disease prevention programs.
9. Use effective strategies to manage and improve the practice of pharmacy.
10. Display professional behaviour in attitude, action, language and dress.
11. Demonstrate professional responsibility and accountability and practices within the scope of a second-year student.
12. Demonstrate initiative and self-directed learning.

GRADING

Title	Weight	Date	Type
Assignment #1: Pharm 454 Learning Plan	Pass/fail	See description	Assignment
Assignment #2: Patient Medical and Medication History and Care Planning Assignment	Pass/fail	See description	Assignment
Assignment #3: Patient Case Presentation	Pass/Fail	See description	Assignment
Assignment #4: Placement Experience	Pass/Fail	See description	Assignment
Preceptor Assessment of Student: Midpoint	Formative	After 80 hours	Assessment
Preceptor Assessment of Student: Final	Pass/Fail	After 160 hours	Assessment
Post Course Student Evaluation of Course (Non-Anonymous)	Completion required in CORE ELMS	Submitted within 48 hours of completing placement	Evaluation

ASSESSMENT INFORMATION

Pharm 454 is a Credit/No Credit Course. At the end of the placement, preceptors recommend a grade of pass or fail on the final Student Performance Assessment (**see Appendix 1**).

To receive credit for the course, students must satisfactorily complete the placement, complete all required assignments including resubmissions requested by the course coordinator in a satisfactory manner (see course assignments section) and complete all required course evaluations (see information below). The Faculty course coordinator provides a final course grade (Pass: Credit or Fail: No Credit) following review of the assessments and submitted assignments. For students who do not submit all assignments and requirements by the deadlines in the syllabus, they will receive No Credit (NC).

All student performance assessments (Appendix 1) are completed and submitted using CORE ELMS. All assessments are posted prior to the start of the placement. Students are encouraged to review so they know the assessment outcomes and criteria. Time points for completing assessments is outlined in the Assessment and Assignment Schedule (**see Appendix 2**). Further information and details regarding each assessment can be found in eClass. As per course policy, students must check UofA email accounts every 3 days for at least 2 weeks following course completion in case an assignment resubmission is required.

Preceptors are encouraged to provide formative feedback throughout the placement. It is recommended students and preceptors discuss how things are going after week 1. Items to be discussed at this time include any early concerns or clarifications regarding expectations or course related activities.

Students Who May Require Support

The student should email the Course Coordinator following review of the Midpoint Student Performance assessment if *any outcomes* are rated as **Not Meeting an Acceptable Level of Performance** or if performance concerns are identified and students would like additional support to address these.

LATE ASSIGNMENT AND ASSESSMENT POLICIES

It is the student's responsibility to submit all assignments and assessments in accordance with the stated deadlines. Assignments posted late on eClass will require completion and submission of a

Professional Accountability Form (in eClass). This form, once completed by the student, is placed in the student's file. Late assignments or assessments may result in a delay of course grade posting. Students will receive a grade of "incomplete" until all course requirements are satisfied.

COURSE SCHEDULE

Scheduled blocks are:

- Block 1: May 1 – May 26, 2023
- Block 2: May 15 - June 9, 2023
- Block 3: May 29 – June 23, 2023
- Block 4: June 12 - July 7, 2023
- Block 5 & 6: July and August (variable dates; see CORE ELMS)

Hours may vary depending on the site, and are generally 8 hours in length each day.

Students will take this course once and must register for the course in the correct block in accordance with University Policies outlined in the calendar.

*May 22 and July 3 (in lieu of July 1) are statutory holidays: it is up to the discretion of the preceptor to decide how to proceed. They may grant the stat day off, a day off in lieu of the stat, provide readings to be done or include that day as a placement day. Refer to [Undergraduate Experiential Education Policies and Procedures Manual](#).

COURSE ASSIGNMENTS

Assignments:

- Are posted before, during and at end of the placement. Must be typewritten, use 11-point font and be double-spaced.
- Assignments containing patient information must have all identifiers removed to ensure patient confidentiality.
- Students will be advised by email if assignment resubmission is required.

COURSE ASSIGNMENTS
Assignment #1: Skills Inventory and Learning Plan Assignment (<i>This assignment needs to be initiated <u>before the start of the placement.</u></i>)
Students are required to complete a skills inventory and develop a Pharm 454 Learning Plan (suggested template in Appendix 3). Determining your own placement-specific goal emphasizes the student's responsibility for development during the placement. It provides insight to your preceptor about areas for development that are important to you. After reviewing together, your preceptor will provide feedback about the feasibility of your goal, which must be written using SMART format.
SMART GOAL: Reminders Specific: <i>Have you precisely described what you are going to achieve?</i> Measurable: <i>How will you know if you have achieved your goal?</i> Attainable: <i>Is this realistic in the time-frame specified?</i> Relevant: <i>Is this important for patient interaction communications?</i> Timed: <i>When will you achieve your goal?</i>
POSTING INSTRUCTIONS (CORE ELMS) Post your Skills Inventory and Learning Plan in CORE ELMS (under My Requirements) at least 1 week prior to the start of the placement to allow the preceptor to view. This provides the preceptor with your initial goal, and this can be revised during week 1 (when you become more familiar with the site and learning opportunities).

As the Learning Plan portion of the assignment is updated, it must be posted again (replacing the prior version). It will be posted a TOTAL of 4 times:

- 1 week pre-placement
- at the end of 1st week (after discussed, refined and finalized with preceptor input),
- midpoint (with progress updates entered by student) and
- at the final (with progress updates entered by the student).

SKILLS INVENTORY ASSIGNMENT IN eCLASS: Skills Inventory will be completed twice in eClass as a survey, both before and after the placement (within 72 hours after placement completed).

Assignment #2: Patient Medical and Medication History and Care Planning Assignment	Posting Instructions (eClass)
<p>The assignment is composed of 2 parts. Part 1: Post ONE pharmacy care plan with ONE DRP for ONE patient. Relevant background data must be included. (See example, supplementary information) Part 2: Respond to the following TWO questions based on the care plan that was posted in part 1 (see eClass for instructions).</p> <ol style="list-style-type: none"> 1. What element of care plan development did you find the most challenging and why? (i.e. determining DRPS, alternatives, etc) 2. What specific skills have you refined with practice during this placement? 	<p>By the last day of the placement post on eClass: Part 1: one care plan. Part 2: answer the three questions using an eClass survey titled "Care Plan Assignment: Part 2"</p>
Assignment #3: Patient Care Plan Presentation	
<p>Prepare a presentation as per instructions in Appendix 5: Supplementary Material, Scholar Activity, Patient Care Plan Presentation (with inclusion of a clinical question). Students will submit a copy of their presentation slides (usually in Power Point).</p>	<p>Post in eClass by final day of placement.</p>
Assignment #4: Placement Experience Zoom Session	Instructions
<p>Prepare to discuss a topic related to your placement. While this topic can be any issue related to your placement experience, 3 theme ideas to choose from are:</p> <ol style="list-style-type: none"> 1. Describe your confidence at the beginning of the placement compared to the end. 2. Discuss the impact of interprofessional collaboration on patient care. 3. Compare/contrast your placement experience in the hospital to your experience in community practice (in Pharm 354). <p>You should outline the issue you will discuss, the impact it had on you, and how it may influence you going forward. This does not need to be submitted on eClass. Students can have prepared notes if this enables them to present/discuss more efficiently. Each student will have 3-4 minutes to present.</p>	<p>Students must sign-up for an online session (each session is 1 hour) to present their "Placement Experience". A sign-up sheet will be on eClass. Typically, students will do this on the last week of their placement. If a time is not available then, it can be done later in term. Every student is required to participate in one session to receive course credit.</p>

COURSE ACTIVITIES

<p>The following activities are designed to allow students to meet course objectives. Given the Covid-19 pandemic, these activities may be modified to account for various practice circumstances.</p>
PROFESSIONALISM, COMMUNICATION, COLLABORATION and LEADER-MANAGER
<p>Please review the following Discussion Topics document to guide topics that should be discussed with your preceptor across the placement. This is also located in Appendix 4.</p>
CARE PROVIDER: See Appendix 5: Supplementary Information
<p>Medical Chart Review</p> <p>Review the medical chart at your site, and be familiar with the various components. Learn where to find the various pieces of information you need to provide care.</p> <p>If you would like a refresher on the components of the medical chart, see Recommended Resources.</p>
<p>Provide Patient Care (may be provided over phone or using other virtual methods)</p> <p>For all patient care encounters, students should provide patient care as deemed appropriate by the preceptor(s) and outlined in the Patient Care Process Document.</p> <p>All documentation and care plans must be reviewed by the preceptor.</p> <p>Students are responsible to complete the following for 4 patients.</p> <ul style="list-style-type: none">● <i>Interview the patient to gather a medical and medication history.</i> This includes conducting a BPMH (Best Possible Medication History), medication reconciliation and allergy assessment. [NOTES: (1) Since med rec may have been completed already, your role may be to verify what was completed by the admitting physician/team, (2) Ensure allergies are documented within the chart AND within the patient's profile in the dispensing system.].● <i>Create a care plan</i>● <i>Complete a risk assessment [for example, renal function and drug dose adjustment, CV risk, atrial fibrillation stroke & bleeding risk]:</i> Students should complete based on patient population and preceptor guidance. See examples of risk calculators in Appendix 5.
<p>Discharge Patient Care (or Patient Counselling) AND/OR Seamless Care Activities</p> <p>Provide discharge or medication counselling, reconciliation and seamless care for at least 2 patients and discuss with the preceptor. Document if appropriate. Review experience and documentation with the preceptor. (The AHS BPMH Discharge Plan Form is posted in eClass.)</p>
COLLABORATOR: See Appendix 5: Supplementary Information
<p>Inter-Professional Collaboration</p> <ul style="list-style-type: none">● Students should spend time with at least 1 other health care professional (if possible) that is caring for one of their patients or is from their unit as deemed appropriate by the preceptor. Time allotted to this will likely range from 1 hour – ½ day. Students should focus on skills they saw demonstrated that could be applied in their practice.
HEALTH ADVOCACY
<p>Participate in site-based advocacy activities where possible (i.e. patient education, education strategies regarding appropriate use of medications, etc).</p>
SCHOLAR: See Appendix 5: Supplementary Information
<p>Drug Information Questions</p> <ul style="list-style-type: none">● Answer at least 4 drug information questions that utilize different resources and discuss with the preceptor. Whether the answers are in written or verbal format is at the discretion of the preceptor.

Patient Case Presentation (with inclusion of a Clinical Question)

- Students must present 1 patient case to pharmacy staff and/or inter-professional team and where possible, other students. The case content should include 1 DRP and corresponding care plan, and evaluate 1 journal article (as learned in BASE 3/4) to inform a clinical decision for the patient.

Suggested presentation format and rubric for evaluating the presentation is in Appendix 5. Presentation slides must be submitted as an assignment (See Assignment #3). Additional resources are posted on eClass for students.

ACTIVITY:

Provide preceptors with an overview of the library resources and search strategies for the UofA Library Database(s) now accessible to preceptors.

The How-To-Guide: UofA Faculty of Pharmacy Library Resources is: <http://tinyurl.com/lgppqay>

The link to the UofA Pharmacy library home page is <http://guides.library.ualberta.ca/pharmacy>

LEADER-MANAGER

ACTIVITY: *Medication Distribution*

Depending on the practice site, participate in the distribution of medications (i.e. screening, order entry, filling, checking) or have a guided tour of the dispensary. Review how prescribed medications are delivered to the patient after they are ordered. Who is involved in the various stages? (physician, medical resident, nurse, ward clerk, pharmacist, pharmacy technician, etc, as appropriate).

ACTIVITY: *Review the [AHS Adverse Events and Patient Safety Website](#).* This website provides AHS health care professionals with resources regarding how to disclose an adverse event. It also includes the AHS policy for reporting adverse events, close calls and potential hazards.

POLICIES and PROCEDURES

All course policies and procedures are included in the [Undergraduate Experiential Education Policies and Procedures Manual](#). Students must review this manual prior to the placement, as there are policies specific to this placement. These include:

- Attendance policies (illness, bereavement, etc.) and participation in professional opportunities such as conferences, UofA flu clinics, PDW, Pharm D interviews, etc. In general, it is expected that students are at the placement site 40 hours per week, with schedule to be determined between student and preceptor.
- Human Blood and Bodily Fluid Exposure (HBBFE) Procedures (Needlestick Injury)
- Protection of Privacy Policy
- Preceptor Recognition procedures

Additional Course Costs

Costs associated with the travel, accommodation or additional practice site requirements are the responsibility of the student. Students are encouraged to apply for bursaries available for placements. (<https://www.ualberta.ca/pharmacy/programs/current-students/current-undergrad-students/awards-scholarships-bursaries/index.html>)

University Policy

The University of Alberta is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect.

Students are particularly urged to familiarize themselves with the provisions of the Code of Student Behaviour (online at www.governance.ualberta.ca) and avoid any behaviour which could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offense. Academic dishonesty is a serious offense and can result in suspension or expulsion from the University.

Audio or video recording, digital or otherwise, of lectures, labs, seminars or any other teaching environment by students is allowed only with the prior written consent of the instructor or as a part of an approved accommodation plan. Student or instructor content, digital or otherwise, created and/or used within the context of the course is to be used solely for personal study, and is not to be used or distributed for any other purpose without prior written consent from the content author(s).

Policy about course outlines can be found in [Course Requirements, Evaluation Procedures and Grading](#) of the University Calendar.

[Territorial Acknowledgement](#)

The University of Alberta acknowledges that we are located on Treaty 6 territory, and respects the histories, languages, and cultures of First Nations, Metis, Inuit, and all First Peoples of Canada, whose presence continues to enrich our vibrant community.

L'Université de l'Alberta reconnaît qu'elle est située sur les terres du Traité 6 et respecte les histoires, les langues et les cultures des Premières Nations, des Métis, des Inuits et de tous les peuples autochtones du Canada, dont la présence continue d'enrichir notre communauté si vivante.

[Pharmacy Code of Professionalism](#)

Students are expected to abide by the Faculty's Pharmacy Code of Professionalism at all times. Lapses in professional conduct may result in the issuing of a Professional Accountability Form. If issued, these forms will be kept on student records for 2 years.

[Accessibility Resources and Accommodations](#) (Formerly: Student Accessibility Services (SAS))

Student accommodations are offered in accordance with the [Faculty of Pharmacy and Pharmaceutical Sciences \(FoPPS\) Essential Skills policy](#). Accommodations are not offered for quiz assessments. Students requiring accommodations for major assessment activities must seek to register with [Accessibility Resources](#) at the beginning of each academic term. Accessibility Resources will work with the FoPPS (Office of Student Services) to determine the nature of any accommodation that will be granted. Once approved, Accessibility Resources will provide students and the Faculty with a "Letter of Accommodation". The Faculty will share accommodation requirements with primary instructors and/or lab instructors.

Equality, Equity and Inclusivity

The Faculty of Pharmacy and Pharmaceutical Sciences is committed to providing an environment of equity and respect for all people within the university community, and to educating faculty, staff, and students in developing teaching and learning contexts that are welcoming to all. The faculty recommends that staff and students use inclusive language to create a classroom atmosphere in which students' experiences and views are treated with equal respect and value in relation to their gender, racial background, sexual orientation, and ethnic backgrounds. In order to create a thoughtful and respectful community, you are encouraged to use gender-neutral or gender-inclusive language and to become more sensitive to the impact of devaluing language. We are working to build a community in which human rights are respected, and equity and inclusion are embedded in all areas of academic, work and campus life.

SUGGESTIONS AND TIPS FOR SUCCESS

Placements are different from classroom learning; they are learning from experience. Students are asked to practice patient care skills in an inpatient hospital setting rather than a skills lab.

Professionalism and communication skills are key to these experiences. It is expected that with time the student's knowledge and skill ability will improve.

This is considered to be an introductory placement so preceptor supervision and support/guidance is important for learning and assessment. Although preceptors will guide the learning, students are ultimately responsible to ensure completion of all activities, assignments and assessments. Full participation in this placement is a professional responsibility as well as the first step to passing the course. Students that succeed maximize their learning opportunities and participate as a pharmacy team member. Due to the variability of practice sites, experiences will differ and students are expected to take initiative and identify learning opportunities.

An important student responsibility is contacting the Faculty with concerns if they arise. There are assessments built into the course that provide checks and balances about learning and the overall experience, however it is important that students contact the Faculty prior to or during the placement to discuss concerns or questions, or if they feel they need additional feedback or support to succeed. These are dealt with in an individual and confidential manner. The article "Strategies Pharmacy Students Can Use to Ensure Success in an Experiential Placement" (*see Required Reading List*) provides helpful information including "obvious" and "not-so-obvious" strategies to ensure success in an experiential placement.

TECHNOLOGY REQUIREMENTS

Course Information and Assignments

- Course Information will be posted in eClass prior to the start of the first placement.
- Assignments will be posted in eClass.
- The Learning Plan and your CV/Resume will be posted in CORE ELMS to allow preceptors to access.

Assessments

All assessments are submitted on-line using CORE ELMS and will be posted prior to the start of the first placement for students to review. If CORE ELMS assistance is required, contact PhExEd@ualberta.ca.

Netcare

Information and instructions regarding Netcare registration and use are outlined on the Faculty website here: <https://www.ualberta.ca/pharmacy/programs/current-students/current-undergrad-students/experiential-education/index.html>

APPENDIX 1: Student Performance Assessment

This table outlines the 17 outcomes and associated behaviours that students will be assessed on by the preceptor at the midpoint and final points of the placement.

OUTCOME	BEHAVIOURS
Professional	
1. Displays professional behavior and adheres to high ethical standards.	<ul style="list-style-type: none"> • Demonstrates honesty, integrity, humility, commitment, altruism, compassion, and respect towards others. • Does not engage in distracting behaviour (e.g. using technology when should be paying attention to patients/team members/preceptor(s). • Maintains privacy and confidentiality. • Dresses professionally and maintains appropriate personal hygiene. • Maintains appropriate interpersonal boundaries. • Is accessible, diligent, timely and reliable to others.
2. Demonstrates professional responsibility and accountability and practices within the scope of a 2nd year student.	<ul style="list-style-type: none"> • Takes responsibility and accountability for actions and inactions; preceptor support may be required. • Seeks guidance when uncertain about own knowledge, skills, abilities or scope of practice. • Prioritizes activities and manages time to balance course requirements and practice site workflow. • Demonstrate awareness of ethical decision-making process as it applies to pharmacy practice; preceptor support may be required. • Applies standards of practice, policies, and codes that govern the profession; practices within the scope of a 2nd year student.
3. Demonstrates initiative, self-directed learning, and commitment to excellence in practice of pharmacy.	<ul style="list-style-type: none"> • Takes initiative to learn, enhance skills and integrate knowledge (i.e. maximizes learning opportunities). • Accepts, incorporates and provides feedback in an effective and constructive manner. • Sets personal goals to support development of professional skills, knowledge and attitudes; preceptor support may be required.
Communicator	
1. Demonstrates effective non-verbal and verbal communication to instill trust and confidence.	<ul style="list-style-type: none"> • Speaks clearly, effectively and respectfully, using appropriate tone and pace. • Uses appropriate non-verbal communication. (e.g. open body language, use of facial expressions). • Listen, actively solicit and respond appropriately to ideas, opinions, and feedback from others (patients, team members, preceptor(s), peer students, etc.) • Demonstrates the appropriate level of confidence. • Uses appropriate language that is suitable for the complexity, ambiguity, urgency of the situation. May require preceptor support.
2. Effectively communicates in writing.	<ul style="list-style-type: none"> • Correctly applies the rules of syntax, grammar and punctuation. • Provides appropriate level of detail and complexity, breadth and depth; preceptor support may be required early in placement. • Uses appropriate language and tone for the type of written communication and intended audience; preceptor support may be required. • Provide timely and clear responses/documentation; preceptor support may be required to tailor to the audience.

Care Provider	
1. Establishes and maintains professional relationships with patients/care givers	<ul style="list-style-type: none"> Engages patient; may require some preceptor prompting and guidance. Exhibits sensitivity, respect and empathy with patients and care givers. Identifies/responds to patient cues with preceptor support. Explains the role of the pharmacist to obtain consent for care.
2. Gathers and interprets relevant, necessary information about a patient's health-related needs.	<ul style="list-style-type: none"> Utilizes multiple sources of patient information to synthesize data to complete a patient history; may require preceptor support initially. Employs effective interviewing techniques (e.g. appropriate open and closed ended questions, uses motivational interviewing when appropriate). Employs a systematic process to gather data accurately based on the Patient Care Process document with preceptor support. Gathers and interprets appropriate amounts of information including relevant physical exam, lab tests, point-of-care and diagnostic assessments for conditions covered with preceptor support. Is improving timeliness and efficiency over the course of the placement Attempts to clarify and manages conflicting data; may require preceptor support.
3. Formulates assessment of actual and potential issues in collaboration with the patient & other healthcare team members; prioritize issues to be addressed.	<ul style="list-style-type: none"> Considers the patient's perspective when identifying & prioritizing medication-related needs. Determines patient's medical condition(s) and determines those where medication needs are not currently being addressed, with preceptor support. Assesses drug therapy for indication, efficacy, adherence and safety with minimal preceptor guidance for therapeutic areas already covered in the curriculum. Attempts to assess drug therapy and identify DRPs for therapeutic areas not covered in the curriculum, with preceptor support.
4. Develops a care plan that addresses medication and health needs	<ul style="list-style-type: none"> Uses a systematic approach to develop care plans with preceptor support. Establishes goals in collaboration with the patient that are relevant, realistic and timely, with preceptor support. Generates a realistic set of alternatives and assesses the pros and cons for conditions covered in curriculum to date. Develops a safe and effective plan (recommendations, monitoring and follow-up), for managing patient needs for conditions covered in curriculum to date with preceptor support. Independently begins development of care plan for DRPs for conditions NOT covered in curriculum. Provides rationale for the chosen plan.
5. Implements the care plan when appropriate	<ul style="list-style-type: none"> Implements specific actions for managing medication-specific needs (dispense, adapt, prescribe, refer, etc.) with preceptor supervision. Communicates the agreed-upon care plan and rationale to patients and/or other healthcare providers with preceptor support. Educates the patient on topics covered in year 1/2 of the program with preceptor supervision (can include disease prevention, management, pharmacological and non-pharmacological recommendations). Negotiates and adapts plan with team and/or patient/caregivers with preceptor support when necessary. Initiates and completes seamless care activities when appropriate with preceptor supervision.
6. Follow-up and evaluate as appropriate	<ul style="list-style-type: none"> Provides follow-up with preceptor support.

	<ul style="list-style-type: none"> Interprets follow-up information to evaluate effectiveness, safety and adherence, and modify plan if needed, with preceptor support.
Collaborator	
1. Works effectively with members of the team including patients and their families, pharmacy colleagues and individuals from other professions.	<ul style="list-style-type: none"> Establishes and maintains positive relationships. Recognizes and respects the unique and shared roles and responsibilities of team members. Participates in respectful decision making with preceptor support. Provides services and care as agreed upon with the patient and team.
2. Hand over the care of a patient to other pharmacy and non-pharmacy team members to facilitate continuity of safe patient care.	<ul style="list-style-type: none"> Identifies when patient handover should occur and what information should be communicated with preceptor support. Demonstrate safe handover of patient care issues and information using appropriate communication processes with preceptor support.
Scholar	
1. Demonstrates the fundamental knowledge required for pharmacists.	<ul style="list-style-type: none"> Has minimal gaps in knowledge for curriculum covered in years 1 & 2. Applies knowledge to identify therapeutic alternatives and determine recommendations that are appropriate, accurate and practical (for topics covered in years 1 & 2).
2. Uses best evidence available to provides medical information and patient care.	<ul style="list-style-type: none"> Uses appropriate resources to provide patient care. Uses appropriate search strategy to identify the best available evidence for a given question. Able to formulate a clinical question with preceptor support. Attempts to analyze relevant information to inform responses to questions and patient care decisions; may require preceptor support. Provides an appropriate and accurate answer or recommendation.
3. Applies clinical judgment to make decisions regarding patient care.	<ul style="list-style-type: none"> Applies therapeutic knowledge (for topics covered in Yrs 1 and 2) and best available evidence into patient care recommendations with preceptor support. Takes an active role in discussions involving decision making. Provide and logically defend rationale related to patient-care decisions.
Advocate	
1. Advocates for patients within and beyond patient care environments.	<ul style="list-style-type: none"> Identify strategies to help patients address determinants of health that affect their health as well as access to services/resources, with preceptor support. Provides patients with health and wellness strategies, with preceptor support.

APPENDIX 2: Activity, Assignment and Assessment Schedule

This schedule is a concise summary of course processes/activities from the syllabus.

Week	Student Activities
<i>1-4 weeks before placement starts</i>	<input type="checkbox"/> Review therapeutics as instructed by preceptor(s) or relevant to the practice area. <input type="checkbox"/> Review syllabus: course expectations, patient care process tools, activities/assignments. <input type="checkbox"/> Review Undergraduate Experiential Education Program Policies and Procedures Manual <input type="checkbox"/> Review readings included on the Required Reading list. <i>See Covid-19 resources.</i> <input type="checkbox"/> Correspond with your preceptor; complete any pre-readings assigned by the preceptor. <input type="checkbox"/> Complete the Skills Inventory in eClass, and start to develop the Learning Plan; post both components on CORE ELMS (under My Requirements) at least 1 week prior to placement.
<i>Daily throughout the placement</i>	<input type="checkbox"/> Prepare care plans and other assignment documentation, drug information requests. <input type="checkbox"/> Ensure activities, including discussion topics and assignments, are completed.
WEEK 1 (0-40 hours)	
<i>Orientation (Day ONE)</i>	<input type="checkbox"/> Discuss expectations; both preceptor and student. <input type="checkbox"/> Discuss and develop placement schedule. <input type="checkbox"/> Discuss assessment processes and timelines. <input type="checkbox"/> Review syllabus (activities and assignments) <input type="checkbox"/> Tour of pharmacy site. <input type="checkbox"/> Login to ensure Netcare access. <input type="checkbox"/> Review and discuss the Skills Inventory and Learning Plan. <input type="checkbox"/> Students in Calgary Zone will complete PPE Passport (download from CORE ELMS)
<i>Familiarization with institution, dispensary and processes</i>	<input type="checkbox"/> Involvement with or introduction to distribution process (site dependent; see Manager Activities). <input type="checkbox"/> Discuss potential patients for the Medical and Medication History assignment. <input type="checkbox"/> Review patient and practice forms and resources; i.e. med rec, patient information.
<i>End of Week 1 or 40 hours</i>	<input type="checkbox"/> Ensure a chart has been reviewed, and that you are able to locate pertinent patient information. Clarify any aspects with your preceptor, as required. <input type="checkbox"/> Debrief with preceptor about expectations, activities, and plan for following 3 weeks. <input type="checkbox"/> Finalize any revisions to the Learning Plan. (Post in CORE ELMS) <input type="checkbox"/> Complete at least 1 Patient Medical and Medication History; review with preceptor.
WEEK 2 (40-80 hours)	
<i>Activities and Assignments</i>	<input type="checkbox"/> Complete med recs, allergy assessment, risk assessment, discharge patient activities and clinical documentation – discuss with preceptor. <input type="checkbox"/> Complete at least 1 more Patient Medical and Medication History by end of week; review with preceptor. Choose one that will be presented as the Patient Case presentation, and draft outline of your case presentation and journal article you will review/critique and present. <input type="checkbox"/> Provide responses to 1-2 drug information requests. <input type="checkbox"/> Initiate discussions with preceptor about various topics outlined in syllabus. Ensure all discussions are not left to the end. Student should bring up topics for discussion to ensure they are completed.
<i>Second Thursday</i>	<input type="checkbox"/> Complete and submit Midpoint Student Self-Assessment (CORE ELMS) so preceptor can review prior to Student Performance Assessment review.

<p><i>End of Week (midpoint)</i></p> <p><i>(or 80 hours)</i></p>	<input type="checkbox"/> Preceptor to complete/submit Midpoint Student Performance Assessment in CORE ELMS. <input type="checkbox"/> Student to complete: Evaluation of Preceptor and Site (CORE ELMS). <input type="checkbox"/> Update progress in Learning Plan (post in CORE ELMS).
<p>WEEK 3 (80-120 hours)</p>	
<p><i>Course Activities Continue</i></p>	<input type="checkbox"/> Spend time with at least one other HCP (IP Collaboration Experience) if possible. <input type="checkbox"/> Continue to complete medication reconciliations, allergy assessment, risk assessment and discharge/seamless care patient activities and assignments/clinical documentation – discuss with preceptor. <input type="checkbox"/> Complete at least 3 Patient Medical and Medication Histories by now; review with preceptor. <input type="checkbox"/> Complete the Advocacy and Leadership activities and discussions. <input type="checkbox"/> Complete discussions involving the distribution process; discuss components of the distribution system and the drug formulary. See Appendix 4. <input type="checkbox"/> Identify 3 specific examples that contribute to drug and patient safety awareness. Discuss the institution’s ADR and incident reporting policies and procedures including documentation processes. Modifications OK based on practice setting. <input type="checkbox"/> Receive and incorporate feedback on Patient Case Presentation and finalize content; present either by the end of week 3 or the beginning of week 4.
<p>WEEK 4 (120-160 hours)</p>	
<p><i>Patient Care Activities</i></p>	<input type="checkbox"/> Complete care provider activities. (total of 4 to be completed as outlined in activities). <input type="checkbox"/> Complete at least 2 patient discharges or seamless care/education by end of placement. <input type="checkbox"/> Review activity table to ensure all activities and discussions have been completed.
<p><i>End of Week 4 (final) (or 160 hours)</i></p>	<input type="checkbox"/> Preceptor to complete Final Student Performance Assessment. <input type="checkbox"/> Preceptor to provide the Grade Recommendation for placement (pass/fail). <input type="checkbox"/> Student to complete: Final Student Self-Assessment (CORE ELMS) <input type="checkbox"/> Student to complete: Evaluation of Preceptor and Site (in CORE ELMS) and discuss with preceptor <input type="checkbox"/> Student to complete and post assignments in eClass; Pharmacy Care Plan Assignment, Parts 1 and 2. <input type="checkbox"/> Update and post the final Learning Plan (in CORE ELMS).
<p><i>Within 48 hours of placement completion (after student leaves site)</i></p>	<input type="checkbox"/> Post-Course Evaluation of Preceptor and Site - Non-Anonymous; must be completed in CORE ELMS and is not reviewed/shared with preceptor. <input type="checkbox"/> Complete (again) the Skills Inventory in eClass. <input type="checkbox"/> Complete Student Course Evaluation - link to survey will be emailed to student. <input type="checkbox"/> Consider nomination of preceptor for a recognition award. (Nomination Survey will be emailed to students).

APPENDIX 3: Skills Inventory and Learning Plan (Instructions and Template)

- First, reflect on your comfort/confidence with the skills and complete the Skills Inventory table. This will provide your preceptor with some perspective about your comfort with skills to be further developed in the course. This inventory is in eClass as a survey assignment. As this does not download in an easy-to-read format, also complete the version below to share with your preceptor in CORE ELMS.
- Then, complete the Learning Plan using the template below.

- During week 1 of your placement, review both your Skills Inventory (Part 1) and your Learning Plan (Part 2) with your preceptor. Revise as necessary and post final version at the end of week 1.
- Discuss the progress achieved for the Learning Plan goal with the preceptor at the midpoint and final of the placement and document this within the Learning Plan. This is your responsibility.
- Following the MIDPOINT student performance assessment, any area(s) rated Needs Improvement or Not Meeting an Acceptable Level of Performance by the preceptor should be added to the Student's Learning Plan along with Indicators of Progress for the balance of the placement.
- Following the FINAL student performance assessment, any area(s) rated Needs Improvement or Not Meeting an Acceptable Level of Performance should be incorporated into learning plans for subsequent placements.

Skills Inventory Template

Skill Development	Student considers their ability to:	Comfort/Confidence Scale						
		1	2	3	4	5	6	7
Communicating with patients	<ul style="list-style-type: none"> - Engage/greet patient - Speak clearly with appropriate confidence. - Listen to identify patient cues and adapt responses. - Explore patient's perspective 	1	2	3	4	5	6	7
Gathering medical and medication history (Med Rec and BPMH)	<ul style="list-style-type: none"> - Introduce self and establish rapport - Gather sufficient information while having a 2-way discussion in a conversational manner. 	1	2	3	4	5	6	7
Conducting Initial patient assessment	<ul style="list-style-type: none"> - Determine if medications are indicated, effective, safe and patient can use/adhere 	1	2	3	4	5	6	7
Creating Basic Care Plans	<ul style="list-style-type: none"> - Can work through care planning process, using worksheet for guidance 	1	2	3	4	5	6	7
Patient Monitoring	<ul style="list-style-type: none"> - Determines appropriate monitoring parameters - Interprets how to use parameters in decision-making 	1	2	3	4	5	6	7
Ongoing Patient Assessment	<ul style="list-style-type: none"> - Determines follow-up required including who is responsible - Interprets follow-up information to evaluate medication therapy and modify plan if needed 	1	2	3	4	5	6	7
Documenting Patient Care Activities	<ul style="list-style-type: none"> - Provides appropriate level of detail and uses an organized process (e.g. Data, Assessment and Plan). - Has focus/clear intent or purpose 	1	2	3	4	5	6	7
Responding to Drug Information Requests	<ul style="list-style-type: none"> - Use appropriate resources - Create an evidence-based response that is tailored to audience 	1	2	3	4	5	6	7
Interacting with Other Healthcare Professionals	<ul style="list-style-type: none"> - Verbal and nonverbal communication expresses confidence, interest, and connection. 	1	2	3	4	5	6	7

Learning Plan Template

Learning Goal (Use SMART format):

Why is this goal important to you? How will it enable you to be a better pharmacist?

Describe the resources and strategies you will use to enable you to achieve your learning goal.

Indicators of Progress: State the indicators that will inform you of your progress or achievement across the 4 weeks.

Progress at MIDPOINT (end week 2)

Summarize:

What has been achieved thus far? What needs to be the focus in the next 2 weeks? Do I need to add any goals (on separate sheet) based on my Midpoint Student Performance Assessment?

Student to type progress here.

Progress at FINAL (end week 4)

Summarize:

What did I achieve? Did this meet my expectations? What will I continue to work on after this placement is over?

Student to type progress here.

APPENDIX 4: Discussion Topics During Placement

PROFESSIONALISM
<ol style="list-style-type: none">1. Discuss strategies preceptor(s) use to achieve the professional behaviors outlined in the assessment. The student should include how they demonstrate this during the placement. Share examples.2. Discuss application of the code of ethics and standards of practice related to hospital-based patient care; include ethical judgment and patient care challenges. For example:<ol style="list-style-type: none">1. When is it ethically and professionally appropriate to involve caregivers and/or family? Are there circumstances where they should not be involved?2. How does the team, including the pharmacist, deal with family tensions?3. How is patient confidentiality maintained? Are there scenarios where this may present challenges?4. Are patients engaged in goal setting and shared decision-making about their care? How and when does this occur? Are there instances when this is not necessary?1. Discuss how your preceptor maintains professional competency through self-directed learning. Examples to highlight include reading literature (how is this identified?), conferences (which ones?), professional advocacy groups, formal training (i.e. Geriatric OR Diabetic Certification), obtaining additional prescribing authorization or authorization to inject, self-directed learning plans.
COMMUNICATION
<ol style="list-style-type: none">1. Communication skills and strategies used to talk with patients and health care providers and how is this adapted during Covid-19 pandemic to ensure safety of patients and staff.2. Modes of communication (written and verbal) used between team members within the pharmacy.3. Communication with other health care professionals (outside the pharmacy).4. How they communicate patient care responsibilities to ensure continuity of care; e.g. documentation, hand off process, etc.?5. Approach to documentation at the practice site.
COLLABORATION
Discuss with preceptor interprofessional collaboration that may have been observed or participated in during the placement as opportunities have arisen. What was the collaboration? How did they work with the other profession(s) to meet patient needs?
HEALTH ADVOCACY
<ol style="list-style-type: none">1. Discuss the pharmacist's role in health promotion to patients including what strategies they use. (e.g. immunizations, smoking cessation, lifestyle changes, infection control/spread, etc.)2. Discuss examples of the advocacy roles of pharmacists (i.e. committee involvement, how to handle drug shortages, development of resources for patients and team members, development of protocols, disaster planning (e.g. pandemic, floods).
LEADER-MANAGER
<i>Distribution Processes and Scope of Practice</i> Discuss distribution process (order entry, filling, checking), and scope of practice for each team member (pharmacists, technicians, assistants, as applicable). Discuss various components of the distribution system (unit dose, IV admixture, ward stock, narcotic controls) and the various scopes of practice of staff.

Medication Distribution Safety

Identify and discuss 3 specific examples that contribute to drug and patient safety awareness. (e.g. smart pumps, unit dose packaging, use of Pyxis© (or equivalent), IV admixture programs, checking procedures, medication administration procedures).

Drug Formulary (either provincial, for various drug plans or at a hospital site)

Discuss with preceptor(s) or dispensary staff the institution's drug formulary and how this impacts medication ordering (i.e. therapeutic substitutions). Also discuss the unique or special medication processes used at that institution; i.e. study protocols, special access drugs, compassionate drug programs.

ADR and Incident Reporting Processes

Discuss with the preceptor the practice site's ADR reporting policies and procedures. Do they report federally in MedEffect? If AHS site, review and discuss AHS procedures (Report and Learning System (RLS) for Patient Safety) outlined on the website as well.
Review and discuss the incident and reporting procedures followed at the site, including documentation.

APPENDIX 5: Supplementary Information

Care Provider Activities

A. Patient Medical and Medication History & Care Planning Activity/Assignment

The patient assessment and care planning process involve the following steps. For more Information, see *Patient Care Process Document* in Required Readings.

- Develop & maintain a professional, collaborative relationship with the patient or agent/caregiver.
- Interview the patient or agent or other relevant healthcare providers to obtain necessary information and determine the patient's medication related & other relevant health-related needs.
- Complete Best Possible Medication History/medical history, and complete medication reconciliation (or review for completeness if completed by another provider).
- Assess patient's medication needs; review for indication, effectiveness, safety and adherence.
- List and prioritize the patient's medical conditions and drug related problems.
- Develop and implement a care plan that is based on best evidence and prioritizes and addresses the patient's drug therapy problems and wellness needs
- Provide accurate and appropriate patient education e.g. patient education, discharge counselling).
- Conduct follow-up and provide continuity of care (seamless care).
- Communicate and document patient care activities.

Each care plan should:

- Include all elements of a care plan (patients without a DRP should have a care plan as part of ongoing monitoring).
- Be developed in collaboration with the preceptor.

Each patient's care plan should identify and work-up all relevant and prioritized issues (to be determined in discussion with your preceptor). Students should ensure the preceptor reviews the entire care plan.

Part 1 (Posting of Care Plan):

Care plans discussed with preceptors may include more than one DRP, but you only submit one DRP and the care plan for it. The care plan worksheet is the preferred format. Handwritten care plans will not be accepted. If the care plan worksheet is not used, typed submissions must include all of the care plan components: medical conditions and/or DRP, goals of therapy, etc.

Relevant background data must be included at the top of the care plan with the following components:

1. Reason for admission
2. HPI
3. PMHx (past medical history)
4. Medication history (include generic name, doses and sig)
5. Pertinent ROS (if applicable)
6. Relevant labs/diagnostic information (if applicable)

See Care Plan Worksheet with Checklist for Assessment below (B) and an example below (C).

NOTE: Blank Pharmacy Care Plan Worksheet posted in eClass.

Complete Part 2 of assignment in eClass.

B. Pharmacy Care Plan Worksheet with Checklist for Assessment

Preceptors can use this form to ensure the student's care plan is complete. Students should use it as a guide for creating care plans.

Relevant Background Data (Narrative): student to insert here (ensuring no patient identifiers)

Pharmacy Care Plan Worksheet with Checklist
<p>MEDICAL CONDITIONS & MED- RELATED NEEDS: List and prioritize each medical condition first, followed by any DRPs identified for a given condition. Although some medical conditions may not have a DRP, a care plan is still necessary for ongoing patient monitoring. DRP Categories: unnecessary drug • drug therapy required • ineffective drug • dose too low • adverse drug reaction/interaction • dose too high • nonadherence</p>
<p><input type="checkbox"/> Are all DRPs identified (based on 4 prime areas of indication, efficacy, safety, adherence)? <input type="checkbox"/> If no, discuss with student; probe to see if those missing can be determined. <input type="checkbox"/> Is rationale provided or discussed for DRPs (based on either patient or provider data)?</p>
<p>GOALS OF THERAPY: For each medical condition and/or DRP state desired goals of therapy/timeframe. Goals: cure, prevent, slow/stop progression, reduce/eliminate symptoms, normalize a lab value. <i>Consider realistic goals determined through patient discussion. Goals of therapy are measurable or observable parameters that are used to evaluate the efficacy and safety of therapy.</i></p>
<p><input type="checkbox"/> Therapeutic goal/outcome(s) stated? <input type="checkbox"/> Patient goal incorporated (if appropriate)</p>
<p>ALTERNATIVES: Compare relevant drug and non-drug therapies that will produce desired goals. List the <u>pros</u> and <u>cons</u> of each therapy as well as rationale for each being included. <i>Consider: Indication • Efficacy • Safety • Adherence • Cost/coverage</i></p>
<p><input type="checkbox"/> Is an assessment of each DRP provided (factors considered to influence/determine a plan)? <input type="checkbox"/> Are alternatives (with rationale for each) provided that would be considered acceptable for current level of student(s)?</p>
<p>RECOMMENDATIONS/ PLAN: In collaboration with the patient and other health care providers, select the best alternative and implement the plan. Provide a rationale for the chosen plan relative to the other alternatives considered. <i>Consider: Drugs: correct drug, formulation, route, dose, frequency, schedule, duration, medication management. Non-drug: non-drug measures, education, patient referral.</i></p>
<p><input type="checkbox"/> Plan/recommendations are outlined Includes: <input type="checkbox"/> dosing considerations <input type="checkbox"/> patient preferences</p> <p>ACTIONS TAKEN <input type="checkbox"/> Appropriate/acceptable action has been taken</p>
MONITORING PLAN
<p>MONITORING PARAMETERS: Determine the parameters for monitoring <u>efficacy</u> and <u>safety</u> for each therapy. Provide rationale for including this and how you expect the parameter to change. <i>Consider: Clinical & laboratory parameters • The degree of change • The time frame</i></p>
<p><input type="checkbox"/> Monitoring plan present Includes: <input type="checkbox"/> safety <input type="checkbox"/> efficacy <input type="checkbox"/> frequency <input type="checkbox"/> duration (if appropriate) <input type="checkbox"/> which healthcare provider will follow-up</p>
<p>FOLLOW-UP: Determine <u>who</u>, <u>how</u> and <u>when</u> follow-up will occur.</p>
<p><input type="checkbox"/> Follow-up plan present, Includes: <input type="checkbox"/> who <input type="checkbox"/> how <input type="checkbox"/> when <input type="checkbox"/> includes outcome (if possible)</p>

Adapted with permission from the Division of Pharmacy Practice, Leslie Dan Faculty of Pharmacy, University of Toronto, 2011.
 Excerpt from Patient Care Process, Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, 2018

C. Care Plan Example

Relevant Background Data

CC: male aged 60-65 yr. admitted with community-acquired pneumonia. IV antibiotics started.

PMHx and Medication Hx:

GERD	TUMS 1-2 prn (last dose was 2 weeks ago)
Dyslipidemia	Primary prevention (No hx of CAD/MI/stroke.). When interviewed, patient indicated he started a pill for high cholesterol 1.5 years ago, but they were expensive so stopped taking them after 6 months. Has not seen his doctor since stopping. Felt it was more important to control BP. Attempted to modify diet to control cholesterol. Completed a Framingham Risk Score (FRS); 10-year CVD risk is 29.4% (high).
Insomnia	Non-pharm measures
HTN	Ramipril 10 mg qam x 1.5 years

Medication Allergies/intolerances: No known drug allergies.

Social Hx: truck driver, recent drug plan with work, smoker, does not drink EtOH.

Labs: LDL (2 months ago) = 5.17mmol/L, non-HDL 3.6 mmol/L, ALT 25, CK normal

Pharmacy Care Plan Worksheet	
MEDICAL CONDITIONS & MED- RELATED NEEDS:	
Medical condition: Hyperlipidemia DRP: Adherence; Needs additional drug therapy	
GOALS OF THERAPY:	
Prevent CV events (MI, stroke). Normalize lab values; reduce LDL-C <2.0mmol/L, and non-HDL<2.6 mmol/L. Will discuss risks/benefits with patient and engage in shared decision making.	
ALTERNATIVES:	
<ul style="list-style-type: none"> ● Initiate statin therapy (rosuvastatin) Pros: effective at reducing LDL (40-50%), reduces CVD events over 2 years (at 20 mg dose), covered by insurance Cons: Cost and tolerability (although tolerated before) ● Ezetimibe Pros: orally available and can be added to statin therapy Cons: only decreases LDL by about 20%, not 1st line therapy b/c not shown to reduce clinical outcomes on its own ● Non-pharmacological/ behaviour changes e.g. diet, exercise Pros: improves overall health/ other clinical outcomes as well, no extra drugs required Cons: requires more patient effort/ motivation, effects may be modest in terms of LDL reduction 	
RECOMMENDATIONS/ PLAN:	
<ul style="list-style-type: none"> • Recommend rosuvastatin 20mg tablet once daily. (affordable now that he has drug plan) and reinforce importance of lifestyle changes as well. • Netcare checked; and this is the drug he was put on 1.5 years ago • Educate patient on indication and common side effects (and how to manage if they occur) <p>Rationale: rosuvastatin effectively lowers LDL by 40-60% at 20mg once daily, pt's baseline liver enzymes are normal (okay to start treatment)</p>	
MONITORING PLAN	
MONITORING PARAMETERS:	
<ul style="list-style-type: none"> • Baseline ALT normal • Lab tests needed: Repeat lipid panel and liver enzyme tests in 6-8 weeks • Patient to self-monitor for signs of muscle pains or weakness, patient continue with diet changes <p>- since cholesterol remained high with 9 months of previous diet; give diet resources and info regarding dietician referral</p>	
FOLLOW-UP:	
Pharmacist will contact community pharmacist and advise: he has a new drug plan that will cover - watch for labs in 6-8 wks on Netcare for ↑↑ liver enzymes and ↓ LDL levels - patient informed to see GP for f/u in 6-8 weeks.	

D. Patient Risk Assessment Activity

Students should:

- Assess at least 4 patient's risk for a specific outcome. (e.g.: global cardiovascular risk, determination of renal function to determine appropriate medication dosing, CHADS2 score for patients with atrial fibrillation to determine patient's risk of stroke, COPD screening, opioid risk assessment).
- Complete risk assessments based on their preceptor's guidance in their particular clinical area.
- Discuss their findings with the preceptor, including patient implications.
- Under supervision of the preceptor if deemed appropriate, document in the patient's medical chart.

Risk Assessment Tools:

1. Framingham Cardiovascular Risk Assessment calculator (link for CVD, 10-year, provided):
<https://www.circl.ubc.ca/cardiorisk-calculator.html> OR also
iCCS app (Canadian Cardiovascular Society) also available, which includes this calculator, for those with an iPhone or iPad.
2. CHADS2 Score and HAS-BLED Score for Major Bleeding (SPARCTool):
<http://www.sparctool.com>
3. Renal Function assessment can be found at:
<http://clincalc.com/Kinetics/CrCl.aspx>

Collaborator Activities

A. Inter-professional Activity Information

Students should spend time with at least 1 other healthcare professional that is caring for one of their patients or is from their unit as deemed appropriate by the preceptor. Examples include assisting a nurse with blood pressure measurement or medication administration, shadowing a physician, physician resident, or dietician, or accompanying a patient while they are receiving care from a healthcare professional such as a physical or occupational therapist.

It is suggested that students use the Inter-professional (IP) Student Shadowing cards; green cards developed by Health Sciences Council (UofA) for the interaction with the health care professional as they provide goals for the interaction as well as discussion points. Students were provided with these cards during the IP launch in Year 1. They can also be printed by going to: [Student Shadowing](#) cards.

Prior to the IP experience students must prepare a goal of what they want to learn through the experience and review it with the preceptor.

During the IP experience students must:

- Demonstrate respect of the practice and knowledge of other health care professionals;
- Work collaboratively;
- Give the healthcare professional the “Practitioners Guide to IP Student Shadowing” (half of the green shadowing card) to provide topics for discussion.

Following the IP experience, students are encouraged to debrief their experience with their preceptor.

Include:

- What was learned?
- Were there any skills used by that health care professional that were interesting or effective? (i.e. patient interviewing)
- Your preceptor’s perspectives regarding;
 - Opportunities for collaboration
 - Barriers or challenges affect collaborative relationships between health care professionals
 - Strategies used to optimize team work and/or overcome common barriers

Scholar Activity

A. Patient Case Presentation (with inclusion of a Clinical Question)

The primary goal of this activity is to allow each student to practice presenting a patient case to colleagues and receive formative feedback *to support their learning*. By sharing patient care experiences, students will develop a systematic approach to presenting information and a deeper understanding of clinical issues.

This activity requires students to provide a verbal presentation of their patient, one DRP and recommendation in a systematic manner. Although this has been practiced in the skills lab, presenting a patient challenges each student to sensibly organize patient information, and also practice formulating a care plan, including the rationale for their recommendations.

This activity allows students to:

- Practice verbal presentation skills (use of Powerpoint can be used to guide presentation; other presentation software can be used also if PPT not preferred and/or available); the format should be discussed with the preceptor in advance of presenting.
- Provide brief evidence-based review of literature (typically one article) to support their recommendations(s) (this has been practiced in BASE courses.)

The presentation should be approximately 15-18 mins in duration, with up to 5 minutes for questions. It is suggested that a patient case be chosen in which interaction with the patient helped the student to assess the DRPs (only one needs to be presented) and where their intervention affected or potentially will affect patient outcomes.

Students and preceptors should discuss the patient care plan they want to present by the midpoint of the placement (i.e. no later than the midpoint assessment discussion). Students should provide the preceptor with a first draft soon thereafter to allow time for preceptor review. Students should then revise the presentation based on the feedback given.

Suggested Presentation Content

(Adapted from FMC Clinical Presentation Guidelines and Rural Journal Club Case Presentation Format)

1. Introduction/outline
 2. Patient case/data
 3. Present Drug Related Problem Selected for Review and Work-up (Suggestion: choose a DRP in a therapeutic area that the student has already learned.)
 4. Disease state background
 5. Goals of therapy
 6. Therapeutic alternatives
 7. Focused clinical question (PICO format) – to be researched by the student
 8. Evidence review (with brief discussion of primary studies, systematic reviews/meta-analysis, or clinical practice guidelines as appropriate to the situation)
 9. Therapeutic recommendation; include monitoring plan (efficacy/toxicity)
 10. Resolution of patient case
-
1. Introduction
Introduce the case briefly; include why the case was chosen and what the main focus of the presentation will be. Provide a brief outline of the major components of the presentation.
 2. Patient Case/Data
Present the following information about the patient:

- Summarize patient database (reason for admission/consult, history of present illness, relevant medical and drug therapy history, physical assessment, labs tests, diagnostic exams pertaining to the focus of the presentation).
- Describe the patient’s drug therapy relating to the case presentation focus, include indications for all drug therapy and specific drug therapy regimen (e.g. dose, route, duration).
- Describe the patient’s progress related to the case presentation focus.

3. Present DRP Selected for Review and Work-Up

State the DRP that will be the focus of the presentation. It is suggested that the chosen DRP be in a therapeutic area that the student has already taken at school so far. The DRP selected does not need to be the most important DRP; it will simply be the focus of the presentation.

4. Disease State Background

Briefly review the disease state relevant to the main DRP. This review should include pathophysiology, therapeutic alternatives and any therapeutic controversies relevant to this case.

5. Goals of Therapy

Describe individualized goals of drug therapy for the DRP (include patient perspective if possible).

6. Therapeutic Alternatives

Discuss alternative ways (both drug and non-drug) to resolve the main DRP and achieve the individualized goals of therapy for this patient.

7. Focused Clinical Question

State the focused clinical question using the PICO format:

P – Patient, population or problem (*How would I describe a group of patients similar to mine?*)

I – Intervention, prognostic factor or exposure (*Which main intervention, prognostic factor or exposure am I considering?*)

C – Comparator or alternative intervention (if appropriate) (*What is the main alternative to compare with the intervention?*)

O – Outcome you would like to measure or achieve (*What can I hope to accomplish, measure, improve or affect?*)

Example:

Patient	Intervention	Comparator	Outcome
In a patient with coronary artery disease...	...would treatment with high dose statin...	...compared to low dose statin...	...better reduce future cardiovascular event rate?

8. Evidence Review and Summary

Please list the resources you consulted in the order that you consulted them. If your search requires use of databases like PubMed to identify original studies, please specify the search terms.

If using a clinical practice guideline recommendation, please discuss the strength of recommendation & quality of evidence and provide a brief summary of the evidence to support the recommendation. If relying on a meta-analysis, study or other lower forms of original evidence, (e.g., case reports) provide a brief synopsis of the BEST evidence you found that was relevant to answer the clinical question. Students have practiced searching, summarizing and critically appraising literature in the BASE courses. Synopses and appraisals may be presented using the ACP Journal Club format. One other option is to use the BEARS (Brief Evidence-based Assessment of Research) worksheet if students choose. The form can be found at:

<https://www.med.ualberta.ca/departments/family-medicine/research/resident-research/bears>

9. Therapeutic Recommendation and Monitoring Plan

Outline the recommendation(s) made to achieve the individualized therapeutic goals for the patient. Explain why this was chosen as the best solution(s) for the patient incorporating best evidence principles and patient-specific factors. Describe monitoring parameters and activities that were/ would be done to determine the outcome of the drug therapy recommendation (if applicable).

10. Resolution of Case

Where possible, present the results of follow-up monitoring to illustrate the patient outcome.

B. Patient Case Presentation Rubric

To be used by the preceptor, and other observers. Student to bring copies to the presentation.

Student's Name: _____ **Assessor's Name:** _____

Presentation Title: _____

Please circle the number that best describes the student's presentation in each of the following categories.

1 – Unable to rate Could not evaluate or missing.	2 – Needs Improvement Outcome measure partially achieved.	3 – Meets Expectations Outcome measure generally achieved.	4 – Exceeds Expectations Outcome measure achieved in exemplary fashion.
-------------------------------------------------------------	---------------------------------------------------------------------	----------------------------------------------------------------------	-----------------------------------------------------------------------------------

Criterion (Ideal Example)	Scale			
	1	2	3	4
Introduction and overview of patient data: <ul style="list-style-type: none"> Includes information that explains why case was chosen, and identifies main focus of presentation Presents logical summary of the patient's presenting symptoms, medical and medication history and progress-to-date Attempts to be concise and present only relevant data 	1	2	3	4
DRP Statement <ul style="list-style-type: none"> Properly states the DRP that is the focus of the presentation 	1	2	3	4
Care Planning Part 1 Goals of Therapy <ul style="list-style-type: none"> Describe individualized goals of drug therapy for the focus DRP; include patient perspective where appropriate Therapeutic Alternatives <ul style="list-style-type: none"> Identifies drug and non-drug alternatives for the focus DRP to achieve goals of therapy, considers the pros and cons of each 	1	2	3	4
Focused Clinical Question and Review of Evidence <ul style="list-style-type: none"> States the question using the PICO format Reviews the evidence that was selected to answer the question Summarizes the evidence and includes relevance to the patient 	1	2	3	4
Care Planning Part 2 Therapeutic Recommendation <ul style="list-style-type: none"> Outlines recommendations made to achieve therapeutic goals for the focus DRP; includes rationale Monitoring Plan and Resolution of Case <ul style="list-style-type: none"> Describe monitoring parameters and interventions that were/would be done to achieve the outcome of any recommendations make for the focus DRP 	1	2	3	4
Presentation Skills <ul style="list-style-type: none"> Speaks clearly; uses appropriate pace and tone Uses language that is appropriate for the audience Poised and maintains focus AV materials and handouts enhance the presentation Adheres to time limits (15 min) 	1	2	3	4
Development and Organization <ul style="list-style-type: none"> Key points are presented in a logical, coherent way; uses transitions well 	1	2	3	4
Questions <ul style="list-style-type: none"> Understands question(s) and provides (or attempts to provide) reasonable response 	1	2	3	4
Overall Impression				

