

Practice Experience Program

Student Performance Assessment

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SECTION 1 - STUDENT PERFORMANCE ASSESSMENT FRAMEWORK

Introduction

The Association of Faculties of Pharmacy (AFPC) focus on what [pharmacy educational outcomes](#) and competencies (measurable skills and behaviors) graduates need to achieve by the end of their pharmacy program. The Care Provider role is the core of the discipline of pharmacy in Canada. Pharmacy Care Providers are medication therapy experts who are grounded in a professional identity. To provide the quality of pharmacy care required, graduates are able to approach pharmacy practice by skillfully integrating Communicator, Collaborator, Leader-Manager, Scholar, and Health Advocate roles into their Care Provider role. The Pharmacy Practice Experience Program Student Performance Assessment Framework utilizes the AFPC educational outcomes roles, as a basis for assessing students during their pharmacy practice experience rotations. Students have an opportunity to perform these activities and demonstrate behaviors in their experiential rotations under the observation, guidance, and appropriate supervision of pharmacy preceptors.

Assessment of student performance in experiential education requires the student to demonstrate that they have acquired specific skills or competencies by performing the activity (i.e., counselling a patient) or producing work (i.e., a care plan for a patient) within the real-world practice setting.¹ This assessment approach evaluates the student's ability to apply the knowledge and skills gained in the classroom in the pharmacy workplace setting for activities that are at an appropriate level for the level of training of the student.

The link to a brief recorded presentation describing the PEP Student Assessment process is found [HERE](#).

PEP Student Performance Assessment Framework

The Student Performance Assessment Framework for the Pharmacy Practice Experience Program contains the following components:

Level descriptions (1-5) of student's ability to perform knowledge, skills, or behaviors with the level of preceptor guidance needed.

Specific **outcomes and outcomes elements** that students should demonstrate during their rotation. These relate to specific rotation activities for each outcome.

Behavior descriptions that make up each outcome element (i.e., what students are expected to do for the outcome element).

A guide for preceptors to determine the **level of complexity of patients** to gauge expectations for direct patient care rotations. Expectations for student's performance is linked to the level of complexity of the patient they are providing care.

Level Descriptions for Assessment of Student Performance

Table 1 below describes the level of performance description that will be used to assess each of the outcome elements on the ‘Assessment of Student Performance form’ on ONE45.

This scale describes a level of student performance from 1 to 5 based on their knowledge skills or behaviors; their ability to apply and integrate information and make judgements; and the amount of guidance required to complete the activity. The level descriptions are based on and adapted from the Dreyfus Model of Skill Acquisition.¹⁻⁴ This model describes skill acquisition through five development stages in which each student must progress through an experiential learning process, in which the support from the pharmacist preceptor gradually disappears and the student is able to demonstrate greater autonomy and independence in completing the activity or skill. Preceptors will be observing and supervising students completing rotation and practice activities and assigning the level that best reflects the student’s performance. **Note: If a student fits within descriptors for two levels (e.g., 2 and 3), the lowest level should be assigned.**

Table 1: Level Descriptions for Assessment of Student Performance

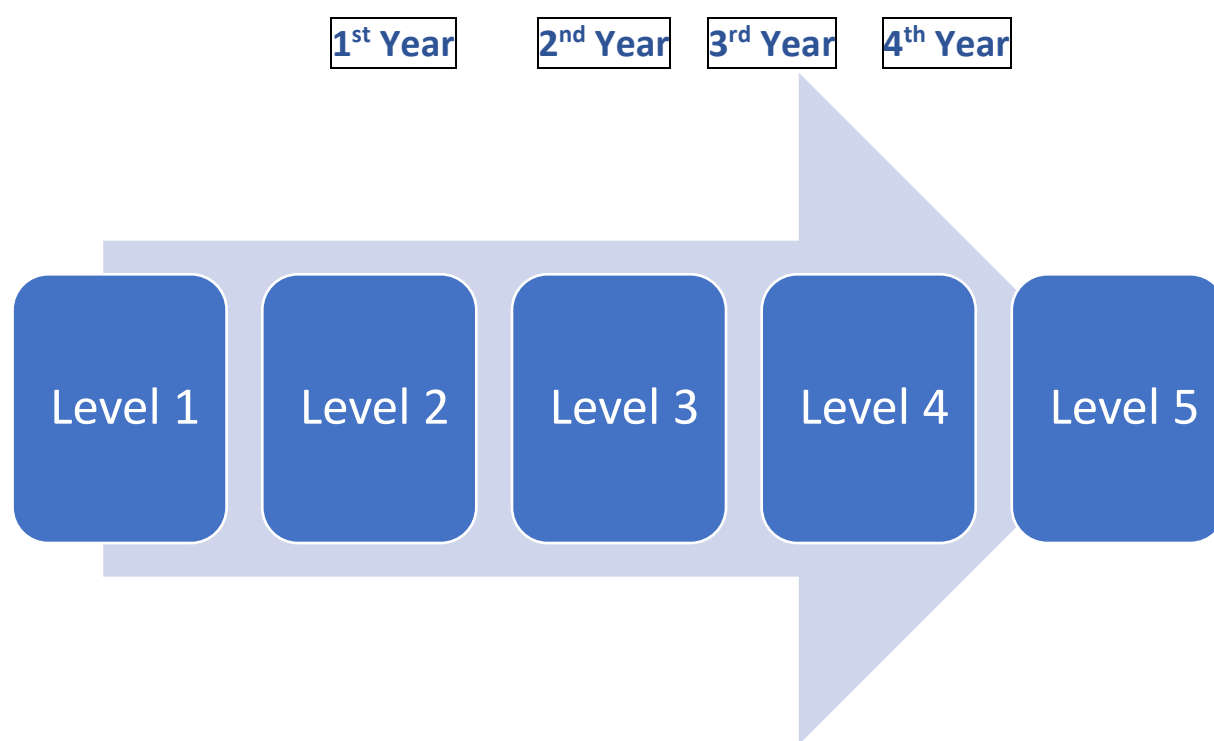
Level 1	Level 2	Level 3	Level 4	Level 5	Not Able to Assess So Far
Student has significant difficulty or deficits of the knowledge, skills or behaviors associated with this outcome; difficulty taking initiative, requires frequent prompting and may make inappropriate judgements; is unable to perform activity despite significant guidance	Student has a basic (“textbook”) understanding of the knowledge, skills or behaviors associated with this outcome; approaches tasks mechanistically and not able to deal with complexity; is only able to perform the activity with significant guidance	Student has a working understanding of knowledge, skills or behaviors associated with this outcome; sees actions as steps and is starting to appreciate complex situations but is only able to achieve some steps using own judgement; takes initiative readily; is able to perform the activity with some guidance	Student has a good working understanding of knowledge, skills or behaviors associated with this outcome but may lack refinement; able to engage more in complex situations; uses judgement appropriately; is able to perform the activity with minimal guidance	Student has a deeper understanding of knowledge, skills or behaviors associated with outcome and can independently perform the task; deals with complex situations holistically and more confident in decision making; consistently takes initiative and full responsibility	The student has not yet been directly observed completing the outcome

Note: All levels above are completed with an appropriate level of pharmacist preceptor supervision for a student who has completed the specific year of study (i.e., 1 to 4) in the pharmacy curriculum (see Figure 1 below).

Expected Level of Performance

The level of performance expected to be achieved by the student by the end of the rotation is dependent on the course and program year (see Figure 1). Students in early introductory rotations are expected to require close supervision and instruction (i.e., perform at lower levels 2-3) and then as their competency increases in future advanced rotations student level of competency (i.e., 4-5) expected is expected to be higher by the end of advanced rotations. As well students will progress in the **level of patient complexity**, they are able to manage (i.e., uncomplicated patients in early experiences, then will engage with patients with higher complexity factors in advanced experiences) as they move through the curriculum (see Table 2). Students are also expected to take more responsibility for their work and have greater autonomy and independence in their practice judgement and clinical decision making as they progress through the program under the appropriate supervision of the pharmacist preceptor that supports safe and effective patient care and the development of student autonomy.

Figure 1. Minimal expected level of student performance corresponding with program year



Guidance:	Significant	Significant	Some	Minimal	Independent
K/S/B*:	Deficits	Basic	Working	Good Working	Deeper
Complexity:	Difficulty With	Difficulty With	Appreciates	Engages	Sees Holistically
Judgement:	Inappropriate	Incomplete	Some	Appropriate	Confident
Patient complexity	Uncomplicated		More complicated		
	Lower complexity factors		Higher complexity factors	Multiple higher complexity factors	

Level of Complexity of Patients

In Introductory Pharmacy Practice Experiences (IPPEs) students will be working to refine their knowledge and skills to provide care for uncomplicated patients. The preceptor may assess a patient’s complexity using the guide below to assist in selecting appropriate patients for rotation activities. **If patient complexity is high in the practice setting, it would be appropriate for students to be assigned to review a single medical condition or routine aspect of a complex patient’s care in order to reduce the complexity of the situation.** Students may be involved in the care of more patients with higher complexity factors; however, it is expected that they will require preceptor support and guidance.

In direct patient care Advanced Pharmacy Practice Experiences (APPEs) student will be working on refining their knowledge and skills to provide care for **uncomplicated and more complicated patients**. In the initial weeks of the rotation, patients of lower complexity can be selected for the student and then the level of complexity of the patient and situation can gradually increase as the rotation progresses.

Table 2. Level of Complexity of Patients

The table below provides guidance on determining the level of complexity of patients that students may be providing care during the rotation.⁶

UNCOMPLICATED - Lower Complexity Factors	Higher Complexity Factors	COMPLICATED
<ul style="list-style-type: none"> • Patient is taking a low number of medications and/or has a few current medical conditions (i.e., 1-2 active) • All patient-related factors are present and easily interpreted • The issue or problem is routine in the practice setting • Management of the problem is straightforward and clear treatment guidelines are available • Prioritization of drug therapy problems is straightforward 	<ul style="list-style-type: none"> • Patient is taking multiple medications and has multiple current medical conditions (i.e., >3-5) • Some patient factors are not present or unclear requiring interpretation and inferences to be made • The issue or problem is not commonly encountered in the practice setting • Management of the problem is more complex (i.e., requires understanding of multiple issues, lack of clear guidelines, clinical information must be applied in a different context, unstable/ill-defined medical condition, medications with narrow therapeutic range/safety index) • Patient has complexities (i.e., communication barriers, ethical issues, patient affect, cognition, or attitude) • Multiple drug therapy problems exist, and prioritization may be complicated 	<ul style="list-style-type: none"> • Multiple higher complexity factors exist and/or are co-dependent

SECTION 2 - DIRECT PATIENT CARE ROTATIONS EXEPECTATIONS

Level Descriptions for Assessment of Student Performance with Descriptive Examples (Table 3)

When assessing student performance at each level for direct patient care rotations, **Table 3** provides descriptive examples of levels 1-5 presented above.

Level Descriptors	Examples
<p>Level 1</p> <p>Student has significant difficulty or deficits of the knowledge, skills or behaviors associated with this outcome; difficulty taking initiative, requires frequent prompting and may make inappropriate judgements; is unable to perform activity despite significant guidance</p>	<ul style="list-style-type: none"> ● When completing an activity* related to the outcome^, student does not seem to possess or is not able to identify the supporting information or skills required to complete the activity ● Student needs to be prompted to engage in activities and shows very little initiative ● Student consistently lacks judgement in how to perform the activity or making decisions ● Student cannot complete the activity without significant and repeated guidance; self-assessment is limited
<p>Level 2</p> <p>Student has a basic (“textbook”) understanding of the knowledge, skills or behaviors associated with this outcome; approaches tasks mechanistically and not able to deal with complexity; is only able to perform the activity with significant guidance</p>	<ul style="list-style-type: none"> ● When completing an activity* related to the outcome, student seems to display some supporting knowledge or skills but is limited in their ability to relate this knowledge to the context or application on their own (i.e., identifies potential side effects to educate a patient but is not able to discern which is most relevant to the situation or how these could be managed; aware of common symptoms for a presenting complaint but is not able to discern what is most relevant to the situation; interviews patient using open and closed ended questions but without precision; identifies a drug interaction but minimal insight on clinical significance) ● Student can engage in an activity but shows little flexibility and minimal growth in their approach ● Student may not be able to identify complexity in a situation (i.e., patient factor, knowledge required, communication or interpersonal challenge) ● Students may not be able to clearly identify and verbalize most relevant factors required for decision making for a situation (e.g., available evidence, patient factors, identified patient needs/goals, etc.) ● When engaging in an activity student usually needs significant guidance ● Student is generally able to self-assess their skills and scope of practice in non-complex situations
<p>Level 3</p> <p>Student has a working understanding of knowledge, skills or behaviors associated with this outcome; sees actions as steps and is starting to appreciate complex situations but is only able to achieve some steps using own judgement; takes initiative</p>	<ul style="list-style-type: none"> ● When completing an activity* related to the outcome, student can identify and use most relevant knowledge or skills related to the context or application on their own for an uncomplicated situation with lower complexity factors# ● Student can engage in an activity using a consistent approach ● Student starts to recognize complexity in a situation (i.e., multiple patient factors, knowledge required, communication or interpersonal challenge) and can provide some insight in areas within their scope of practice while recognizing their own limitations (i.e., patient has conditions outside of student’s current knowledge base which are identified, and discussion is prompted) ● Students can clearly identify and verbalize most relevant factors required for decision making for an uncomplicated situation (e.g., available evidence, patient factors, identified patient needs/goals, etc.) and seeks advice for how to manage more complicated situations

<p>readily; is able to perform the activity with some guidance</p>	<ul style="list-style-type: none"> ● Student does not need to be prompted to engage in activities, shows initiative to identify potential learning opportunities ● When engaging in an activity the student needs some guidance (i.e., initial direction or affirmation on how to complete the task, prompting to ensure all relevant information is gathered, assistance in making decisions or implementing recommendations appropriate for the specific practice context) with new activities but less so when repeating similar activities ● Student is able to self-assess their skills and scope of practice is most situations
<p>Level 4 Student has a good working understanding of knowledge, skills or behaviors associated with this outcome but may lack refinement; able to engage more in complex situations; uses judgement appropriately; is able to perform the activity with minimal guidance</p>	<ul style="list-style-type: none"> ● When completing an activity* related to the outcome, student can identify and use relevant knowledge or skills relevant to the context or application on their own for uncomplicated and some more complicated situations with some higher complexity factors[#] ● Student can engage in an activity using a consistent approach that is flexible according to the situation ● Student can recognize and engage in more complex situations (i.e., multiple patient factors, knowledge required, communication or interpersonal challenge) and can apply judgement appropriately ● Student can clearly identify and verbalize most relevant factors required for decision making for uncomplicated and increasing more complex situations (e.g., available evidence, patient factors, identified patient needs/goals, etc.) and identifies areas of uncertainty to discuss ● Student can self-assess their skills; takes responsibility for learning and their actions within their student scope of practice ● Once oriented to an activity the student can report succinctly and effectively to verify and justify their approach taken and is able to perform the activity proactively and with minimal guidance
<p>Level 5 Student has a deeper understanding of knowledge, skills or behaviors associated with outcome and can independently perform the task; deals with complex situations holistically and more confident in decision making; consistently takes initiative and full responsibility</p>	<ul style="list-style-type: none"> ● When completing an activity* related to the outcome, student can identify and use relevant and in-depth knowledge or skills related to the context or application on their own for uncomplicated and complicated situations with multiple higher complexity factors[#] ● Student can recognize and engage in most complex situations (i.e., multiple patient factors, knowledge required, communication or interpersonal challenge) with ease and insight, seeing the situation as a whole ● Student displays confidence in making decisions and can provide complete, unsolicited justification ● Student can self-assess their skills and is aware of their scope of practice; recognizes and is beginning to feel more comfortable with uncertainty ● Student takes initiative and full responsibility in performing activities independently

* Activity: this relates to specific rotation activities (i.e., patient consultations and work ups, prescription processing, patient intake, medication history or education, medication reconciliation, medication order review, drug information, interprofessional collaboration, prescribing, administration, etc.)

^ Outcomes: refer to outcomes and outcome elements for specific descriptions of knowledge and skills students should possess and perform. For each outcome element refer to the behavior descriptions that outline the specific behaviors that students should be able to perform.

[#] Complexity factors: refer to Table 3 Level of Complexity of Patients in the Student Performance Assessment For Preceptors Guide for examples of complexity factors

Notes:

- **All levels are completed at an appropriate level of pharmacist preceptor supervision for a student who has completed the specific year of study (i.e., 1 to 4) in the pharmacy curriculum.**
- **Students should be assigned the level that best represents their performance for the outcome. If a student fits within descriptors for two levels (e.g., 2 and 3), the lowest level should be assigned.**

Expectations for Students Completing their Introductory Pharmacy Practice Experience -1 in Community (IPPE-1 C)

This is the first opportunity for students to apply their knowledge and skills in a rotation in the community pharmacy practice setting. Students will likely require a fair amount of guidance in the beginning of the rotation to be able to care for uncomplicated or lower complexity patients. Students may take longer than usual to complete tasks and are still developing their patient-centered communication and assessment skills. When beginning at the site students should ‘know’ the steps in dispensing medications but will not be able to ‘show how’ without coaching or initial teaching. By the end of the rotation students should have demonstrated progression from “**knows**” (about patient education or filling prescription) to “**knows how**” (learns how to provide basic patient education to a patient, or can fill and check prescriptions using the pharmacy practice management system at the site) and to “**shows how**” (can perform the task at a basic level – provides patient education on simple regimens confidently and completely or fills and checks prescriptions correctly with some confidence).⁵

In PHAR 1083, by the end of the rotation, students are expected to consistently demonstrate a 2 or 3 level of performance on outcomes 1-6 in caring for uncomplicated patients while completing rotation activities, and consistently* display the professional behaviors indicated (7).

*** For the professional outcome, for this IPPE rotation, students may also pass the rotation if they are assessed as ‘minor lapse and demonstrating refinement.’** See details and rationale below in Section 3.

NOTE: It is not expected that first year students demonstrate a 4 or 5 level for rotation outcomes. However, students with previous pharmacy practice experience may achieve higher levels on some outcomes (i.e., establishing a professional relationship, communicator, or collaborator outcomes) during their introductory rotation.

Expectations for Students Completing their Introductory Pharmacy Practice Experience -2 in Hospital (IPPE-1 H)

This is the first opportunity for students to apply their knowledge and skills for patient care in a hospital pharmacy setting. When beginning at the site, students will need to be oriented to the medication distribution and patient/care activities provided by the inpatient pharmacy and the processes and procedures for completing these activities will need to be reviewed. Students will likely require more guidance at the beginning of the rotation related to what information is available (i.e., from the patient or health care team, medication administration record, patient record) and how to gather and assess that information. Students have had previous experience caring for uncomplicated or lower complexity patients in the community pharmacy setting but will not be familiar with the health care needs and complexity of patients in the hospital setting. Students may take longer than usual to complete tasks and will be developing their skills in gathering, interpreting, and assessing the patient information available in the inpatient environment. Students will be developing their skills in identifying drug therapy problems in this setting. Initial clinical decision making will require coaching and guidance. By the end of the rotation, students should be able to perform tasks at a basic level with some guidance for uncomplicated patients or situations.

In PHAR 2083, by the end of the rotation, students are expected to consistently demonstrate a 3 level of performance on outcomes 1-6 in caring for uncomplicated patients while completing all required rotation activities, and consistently* display the professional behaviors indicated (7).

*** For the professional outcome, for this IPPE rotation, students may also pass the rotation if they are assessed as ‘minor lapse and demonstrating refinement.’** See details and rationale below in Section 3.

NOTE: It is expected that students may progress from a level 2 early in the rotations (i.e., mid-point assessment) to a level 3 (requiring some guidance to complete rotation activities) by the end of the rotation.

NOTE: It is not expected that second year students demonstrate a 4 or 5 level for rotation outcomes. However, students with previous pharmacy practice experience may achieve higher levels on some outcomes (i.e., establishing a professional relationship, communicator, or collaborator outcomes) during their introductory hospital rotation.

NOTE regarding assessment of Manager Leader outcome for PHAR 2083: A main outcome of this rotation is for students to ‘describe the process of medication distribution and order review in the hospital pharmacy setting’. In select settings, students may be able to participate in the medication dispensing and distribution process to meet the applied outcome of ‘preparing and dispensing medications accurately and safety’ that is indicated in the rotation assessment form. In this case the main outcome – Manager-Leader – Contributes to the medication distribution process can be assessed. If the student is not participating in the distribution process at this level (which is acceptable for this rotation), preceptors can indicate a “Not Assessed” for this outcome and include a brief description of how the student was exposed to the learning outcome to build a fundamental understanding of the medication distribution process in the Manager-Leader comment field on the assessment form.

Expectations for Students Completing their Core Patient Care Advanced Pharmacy Practice Experience (APPE) Rotations

The core patient care APPEs are culminating patient care experiences where students will have an opportunity to apply knowledge and skills gained during the pharmacy curriculum to patient care and pharmacy practice within a collaborative healthcare (PHAR 4081) and community pharmacy (PHAR 4082) setting. Students will need to be oriented to the practice setting and will require more guidance at the beginning of the rotation while they begin to integrate into pharmacy and organizational workflow. As the rotation continues, students should be able to engage in higher levels of complexity, require less guidance, and when competence is demonstrated, can assume more independence and autonomy for medication distribution and patient care activities at an appropriate level of pharmacist supervision.

In PHAR 4081 and 4082, by the end of the rotation, students are expected to consistently demonstrate a 4-5 level of performance on outcomes 1-6 in caring for uncomplicated and more complicated patients while completing all required rotation activities by the end of the rotation, and consistently display the professional behaviors indicated (7).

NOTE: A level of 4-5 is expected regardless of the timing of the APPE clinical rotation (i.e., scheduled early vs late in the APPE period). Due to the extended duration of the core APPE rotations it is expected that students may progress from a level 3 of performance for uncomplicated or more complicated patients early in the rotations (i.e., first and/or second interim assessment) to a level 4-5 by the end of the rotation.

NOTE: It is not an expectation that students achieve a level of 5 for all rotation outcomes. Some students may have more experience or confidence and therefore may complete assigned tasks more independently. Level 5 indicates that the student has achieved a higher level of practice-readiness.

NOTE regarding assessment of Manager Leader outcome for PHAR 4081: A main outcome of this rotation is for students to ‘demonstrate a fundamental understanding of the medication distribution system’ in the practice settings. In some settings, students may be able to integrate and participate in the medication dispensing and distribution process to meet the applied outcome of ‘preparing and dispensing medications accurately and safety’ that is indicated in the rotation assessment form. In this case the main outcome – Manager-Leader – Contributes to the medication distribution process can be assessed. If the student is not participating in the distribution process at this level (which is acceptable for this rotation), preceptors can indicate a “Not Assessed” for this outcome and include a brief description of how the student was exposed to the learning outcome to build a fundamental understanding of the medication distribution process in the Manager-Leader comment field on the assessment form.

SECTION 3 - ASSESSMENT OF STUDENT PERFORMANCE FOR DIRECT PATIENT CARE ROTATIONS

Rotation Outcomes

The following outlines the seven main outcomes that will be assessed during direct patient care PEP rotations. Each outcome has associated outcome elements that further delineates the outcome, as well as behavior descriptions that help describe the specific behaviors students are expected to perform for the outcome elements. As noted below there are some outcomes that are only relevant to specific rotations (IPPEs, APPEs or rotations in community). Preceptors will complete an assessment of student performance at midpoint or at interim assessment periods and at the end of the rotation as a final assessment.

When completing the assessment form on ONE45, preceptors should indicate the level of performance the student has demonstrated for each outcome as observed during the rotation. If the outcome has not been observed by the time of the assessment, 'not assessed' can be assigned. **For each outcome, preceptors should provide a brief justification, including specific examples should be documented in the comments section of the form on ONE45, describing how the student has achieved the level of performance.**

Outcome (Outcome element) Note: See behavior descriptions that make up each outcome element below.	Level 1	Level 2	Level 3	Level 4	Level 5	Not Assessed
1. Care Provider: Provide patient care using the pharmacist's patient care process for uncomplicated patients focusing on therapeutic topics covered for the curriculum for the year of study (IPPE)						
1. Care Provider: Provide patient care using the pharmacist's patient care process for uncomplicated patients and more complicated patients (APPE)						
1.1 Assessment: Establishes and maintains professional relationships with patients/caregivers	0	0	0	0	0	0
1.2 Assessment: Collects a complete and patient centered history including a medication history	0	0	0	0	0	0
1.3 Assessment: Identifies and prioritizes drug-therapy problems and health care needs	0	0	0	0	0	0
1.4 Care Plan: Develops a care plan, in collaboration with the patient/caregiver and other healthcare team members that addresses medication and health needs	0	0	0	0	0	0
1.5 Care Plan: Implements the care plan when appropriate	0	0	0	0	0	0
1.6 Follow Up: Provides follow up and evaluates care as appropriate	0	0	0	0	0	0
Care Provider Comments:						
2. Communicator – Communicates effectively						
2.1 Uses appropriate verbal and non-verbal communication skills that are appropriate to the audience and context	0	0	0	0	0	0
2.2 Effectively communicates in writing	0	0	0	0	0	0
Communicator Comments:						

3. Scholar – Uses fundamental knowledge, integrates evidence, and makes sound decisions						
3.1 Identifies and uses fundamental knowledge required for pharmacists	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.2 Integrates best available evidence when providing advice and patient care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.3 Makes and justifies clinical decisions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scholar Comments:						
4. Collaborator – Collaborates effectively						
4.1 Fulfills professional roles and responsibilities within the team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.2 Works effectively with members of the health care team including pharmacy staff, health care providers and patients/caregivers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Collaborator Comments:						
5. Manager Leader – Contributes to the medication distribution process (IPPE)						
5. Manager Leader – Contributes to the medication distribution process and displays leadership in practice (APPE)						
5.1 Prepares and dispenses medications accurately and safely (<i>IPPE and APPE in community</i>)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5.2 Displays leadership in contributing to and enhancing pharmacy practice in the setting (<i>APPE</i>)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Manager-Leader Comments:						
6 Health Advocate – Advocates for health needs						
6.1 Identifies the health needs of patients	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.2 Promotes the health and well-being of individual patients and communities (<i>APPE in Community</i>)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Advocate Comments:						
7 Professional – Acts professionally*						
7.1 Displays professional behavior and adheres to ethical standards	<input type="radio"/> Inconsistently demonstrates <input type="radio"/> Developing and demonstrating refinement <input type="radio"/> Consistently demonstrates					
7.2 Takes professional responsibility and accountability within scope of practice of a pharmacy student	<input type="radio"/> Inconsistently demonstrates <input type="radio"/> Developing and demonstrating refinement <input type="radio"/> Consistently demonstrates					
7.3 Displays initiative, self-directed learning, and commitment to excellence in pharmacy practice	<input type="radio"/> Inconsistently demonstrates <input type="radio"/> Developing and demonstrating refinement <input type="radio"/> Consistently demonstrates					

Professional Comments:

* For the professional outcome, students early in their development may still be refining their professional attributes and behaviors. If a minor lapse in professionalism is observed by the preceptor or team, the preceptor should discuss the behavior and develop an action plan to address this. Specific details of the lapse should be documented on the assessment form. If the student shows improvement in their behaviors as outlined in the plan, students can be assessed as ‘minor lapse and demonstrating refinement.’ If the student does not demonstrate growth in the professional outcome, students should be assessed as ‘inconsistently demonstrates’. Note: students may only demonstrate ONE minor lapse in professionalism during the rotation to be eligible to pass the rotation. In the case of concerning professionalism behaviors, please contact the PEP team as soon as the potential concern is identified: pepadm@dal.ca .

Behavior Descriptions for Outcome Elements

This table outlines the outcomes and their specific elements and associated behaviors that can be assessed during the rotation.

OUTCOME (Outcome Element)	BEHAVIOR DESCRIPTIONS
1. Care Provider: Provide patient care using the pharmacist’s patient care process for uncomplicated patients focusing on therapeutic topics covered for the curriculum for the year of study (IPPE)	
1. Care Provider: Provide patient care using the pharmacist’s patient care process for uncomplicated and more complicated patients (APPE)	
1.1 Assessment: Establishes and maintains professional relationships with patients/caregivers	<ul style="list-style-type: none"> • Establishes a caring professional relationship with the patient centered on the patient’s needs • Exhibits sensitivity, respect and empathy with patients and caregivers • Properly introduces themselves and establishes credibility and trust
1.2 Assessment: Collects a complete and patient centered history including a medication history	<ul style="list-style-type: none"> • Utilizes multiple sources of patient information to synthesize data to complete a patient history i.e., patient/family, pharmacy and medical records, clinical and drug databases, etc.) • Employs effective interviewing techniques. (e.g., appropriate open and closed ended questions) • Employs a systematic process to gather data accurately • Gathers an appropriate amount of information • Completes appropriate patient assessment as applicable (e.g., inhaler technique, lab tests, vital signs, etc.). • Attempts to clarify and manage conflicting data • Able to justify the significance of information gathered in relation to the patient
1.3 Assessment: Identifies and prioritizes drug-therapy problems and health care needs	<ul style="list-style-type: none"> • Synthesizes information to identify drug therapy problems and health care needs • Assesses drug therapy for indication, efficacy, safety, and adherence to identify drug-therapy problems for areas already covered in the curriculum for the year of study • Attempts to assess drug therapy and identify drug-therapy problems for therapeutics areas not covered in the curriculum with preceptor support • Appropriately prioritizes and justifies drug therapy problems

OUTCOME (Outcome Element)	BEHAVIOR DESCRIPTIONS
1.4 Care Plan: Develops a care plan, in collaboration with the patient/caregiver and other healthcare team members that addresses medication and health needs	<ul style="list-style-type: none"> • In conjunction with the patient/caregiver/family and other health care providers: <ul style="list-style-type: none"> ○ Establishes goals of therapy ○ Identifies and assesses potential options to resolve each drug therapy problem and meet goals of therapy ○ Makes a shared decision and provides rationale ○ Develops a complete monitoring plan (i.e., what to monitor, who to monitor, when and how)
1.5 Care Plan: Implements the care plan when appropriate	<p>Implements the care plan when appropriate:</p> <ul style="list-style-type: none"> • Implements specific actions for managing medication specific needs (i.e., dispense, adapt, prescribe, administer, refer, deprescribe, order, etc.) • Makes an appropriate recommendation to the patient/caregiver/family, prescriber, or health care provider • Provides safe and effective patient education • Communicates the agreed upon care plan and rationale to patients and/or health care providers • Identifies when the patient’s health care needs are outside of the pharmacist’s scope requiring referral
1.6 Follow Up: Provides follow up and evaluates care as appropriate	<ul style="list-style-type: none"> • Provides follow up if possible • Collects and interprets follow up information to evaluate efficacy and safety of the care plan implemented • Identifies any new drug therapy problems that may be occurring
2 Communicator – Communicates effectively	
2.1 Uses appropriate verbal and non-verbal communication skills that are appropriate to the audience and context	<ul style="list-style-type: none"> • Communicates appropriately verbally, non-verbally, in writing or via communication technology with patients, the pharmacy and health care team • Is able to tailor communication to specific contexts and audiences • Speaks clearly, respectfully, and confidently using appropriate tone and pace • Demonstrates sensitivity, respect, empathy and inclusion in communications and interactions
2.2 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 • Writing is clear, accurate, organized, concise and audience-appropriate • Ensures that records of care, actions and decisions are documented in the patient record • Documentation is timely and fulfills professional and legal requirements
3 Scholar – Uses fundamental knowledge, integrates evidence, and makes sound decisions	
3.1 Identifies and uses fundamental knowledge required for pharmacists	<ul style="list-style-type: none"> • Displays adequate knowledge (minimal gaps) for common conditions seen at the rotation site for therapeutic topics covered in the curriculum for the year of study • Identifies and fulfills learning needs for therapeutic topics not or not yet covered in the curriculum for the year of study • Applies knowledge to patient care and pharmacy services

OUTCOME (Outcome Element)	BEHAVIOR DESCRIPTIONS
3.2 Integrates best available evidence when providing advice and patient care	<ul style="list-style-type: none"> • Uses an appropriate search strategy to identify the best available resources for a given question or situation • Identifies and uses appropriate resources • Critically appraises, interprets, and analyzes information from resources to formulate responses, make decisions and provide recommendations/advice • Integrates best available evidence into patient care decisions
3.3 Makes and justifies clinical decisions	<ul style="list-style-type: none"> • Takes an active role in discussions involving decision making • Uses available information, therapeutic knowledge, problem solving and professional judgement to arrive at recommendations and decisions that are appropriate, accurate and practical • Able to articulate and justify a recommendation and decision
4 Collaborator – Collaborates effectively	
4.1 Fulfills professional roles and responsibilities within the team	<ul style="list-style-type: none"> • Recognizes and respects the unique and shared roles and responsibilities of pharmacy and health care team members • Able to articulate pharmacist’s role and responsibilities in the practice setting within the team • Fulfills professional role within the scope of practice of a pharmacy student
4.2 Works effectively with members of the health care team including pharmacy staff, health care providers and patients/caregivers	<ul style="list-style-type: none"> • Establishes and maintains positive relationships with patients, pharmacy teams members and other health care providers • Recognizes and can negotiate shared and overlapping responsibilities • Participates in respectful, effective shared decision-making • Determines when and how care should be handed over to another team member • Makes an effort to integrate into team
5. Manager Leader – Contributes to the medication distribution process (IPPE)	
5. Manager Leader – Contributes to the medication distribution process and displays leadership the practice (APPE)	
5.1 Prepares and dispenses medications accurately and safely	<ul style="list-style-type: none"> • Demonstrates a basic understanding of and participates in all aspects of the medication dispensing process as applicable to the setting • Accurately compounds dosage forms when possible • Accurately performs pharmaceutical calculations • Verify the technical aspects of prescriptions • Recognizes factors and processes required for safe and efficient medication distribution
5.2 Displays leadership in contributing to and enhancing pharmacy practice in the setting	<ul style="list-style-type: none"> • Recognizes the importance of their effort and contribution to the organization • Demonstrates initiative and identifies opportunities to contribute to organizational goals, objectives and/or services • Actively participates in practice-based initiatives where available (i.e., projects, discussions, presentations, quality assurance) to improve the quality of care, pharmacy practice or organizational practice
6 Health Advocate – Advocates for health needs	
6.1 Identifies the health needs of patients	<ul style="list-style-type: none"> • Identifies and recognizes the effects of social determinants of health in the public and community for the practice population • Assists patients in accessing needed health services or resources • Describes and fulfills advocacy roles within the practice setting

OUTCOME (Outcome Element)	BEHAVIOR DESCRIPTIONS
6.2 Promotes the health and well-being of individual patients and communities <i>(APPE in community)</i>	<ul style="list-style-type: none"> • Incorporates disease prevention and health promotion into interactions with individual patients • Participate in health promotion or disease prevention programs
7. Professional – Acts professionally	
7.1 Displays professional behavior and adheres to ethical standards	<ul style="list-style-type: none"> • Displays honesty, integrity, humility and commitment, altruism, compassion and respect for diversity and patient autonomy • Is accessible, diligent, timely and reliable to others • Maintains appropriate interpersonal boundaries • Dresses appropriately and professionally • Maintains privacy and confidentiality • Adheres to the code of ethics applicable to their jurisdiction • Demonstrates awareness of laws, standards of practice, policies and codes that govern the self-regulated profession of pharmacy
7.2 Takes professional responsibility and accountability within scope of practice of a pharmacy student	<ul style="list-style-type: none"> • Takes responsibility and accountability for actions and inactions • Seeks guidance when uncertain about knowledge, skills, abilities, or scope of practice • Prioritizes activities and manages time to balance rotation requirements and practice site workflow • Demonstrates a commitment to patient safety and quality improvement • Applies standards of practice, policies and codes that govern the profession and practices within the student’s scope of practice
7.3 Displays initiative, self-directed learning, and commitment to excellence in pharmacy practice	<ul style="list-style-type: none"> • Takes initiative to learn, enhance and integrate knowledge and skills • Accepts, incorporates, and provides feedback in an effective and constructive manner • Sets personal goals to support development of professional skills, knowledge, and attitudes

Note: Outcomes, outcomes elements and behavior descriptors wording in the student performance assessment materials for direct patient care rotations are adapted from assessment instruments: University of Alberta⁶, University of British Columbia¹ and Ontario Pharmacy Patient Care Assessment Tool³, and the Association of Faculty of Pharmacy Educational Outcomes for First Professional Degree Programs in Canada⁸.

SECTION 4 - STUDENT SELF-ASSESSMENT DURING DIRECT PATIENT CARE ROTATIONS

Student Self-Assessment During Rotations

Students will complete self-assessments of their ability to perform the main direct patient care rotation learning outcomes during the placement. This self-assessment will help to identify learning goals and will assist the student in identifying areas to work on and to monitor their progress in achieving the learning outcomes during the rotation.

Self-assessments will be completed by students:

1. Before the first day of the rotation, students will review the main activities that will be completed during the rotation and the **skills inventory** ([See Appendix A](#)) outlining rotation outcomes and behaviors will be reviewed. The skills inventory will be used to identify personal learning goals for the rotation as part of the **Learning Plan on ONE45** (see rotation manual for directions in completing Learning Plans during the rotation).
2. Students will complete a self-assessment on ONE45 at the **mid-point assessment** period during IPPE rotations or APPE elective rotation, at each of two **interim assessments** periods for their core APPE rotations, and at the **final assessment** for all rotations. When completing mid-point, interim and final assessments on ONE45 students should self-assess their level of performance on the rotation, comparing it to the levels of performance on the assessment form. For ease of use, the student self-assessment form provides level descriptions for student performance that are described from the perspective of the student that mirrors the scale used by preceptors (see **Table 4**).

Table 4: Level Description for Student Performance for Students

Level 1	Level 2	Level 3	Level 4	Level 5	Not Able to Assess So Far
I have significant difficulty or deficits of the knowledge, skills or behaviors associated with this outcome (<i>this is new to me, or I haven't had a chance to practice this skill much yet</i>); I am not able to do this activity task on my own without prompting and significant preceptor guidance	I only have basic ("textbook") understanding of the knowledge, skills or behaviors associated with this outcome (<i>I know things but application to the real-life task can be challenging</i>); I will likely have to break down the activity tasks to get it done, I struggle with complex issues and will require preceptor guidance	I have a working understanding of knowledge, skills or behaviors associated with this outcome (<i>I know it and I can apply my knowledge in routine situations</i>); I can do the activity tasks in steps and take initiative in completing tasks; I am starting to appreciate complex situations, but I need guidance from my preceptor when making decisions	I have a good working understanding of knowledge, skills or behaviors associated with this outcome (<i>I know it and can apply it in many but not all situations</i>); I can handle more complex situations and make decisions using my own judgement; I can do the activity with minimal preceptor guidance	I have a deep understanding of knowledge, skills or behaviors associated with outcome. I can handle more complex situations and I can see the situation as a whole. I can independently perform the activity task, make decisions, and can take full responsibility	I haven't had a chance to do activity tasks related to this outcome

SECTION 5 - ASSESSING STUDENT PERFORMANCE FOR PRECEPTORS

Steps for Assessing Student Performance

Preceptors can use the following basic steps when assessing student performance:¹

1. Review the **learning outcomes and activities** for the rotation and define expectations
2. Collect information about the student's performance by **observing student complete rotation activities**. Accurate assessment requires multiple observations of the student and regular ongoing interactions between the preceptor and student. It is also important to seek input from others working closely with the student for some of the learning outcomes (i.e., professionalism, communication, collaboration, etc.)
3. **Compare** the collected information about the **student's performance** with **the learning outcomes** in the assessment form and **behaviors** that make up the outcome element. **Determine the level of performance** the student is able to complete the activities (i.e., based on their knowledge skills or behaviors, their ability to apply and integrate information and make judgements and amount of guidance required to complete the activity).
4. **Encourage student self-reflection** so that students critically evaluate their own work and are proactive in incorporating ongoing feedback into their learning plan.
5. Regularly **provide formative** (i.e., ongoing through the learning process) **feedback** to the student. Identify opportunities to observe behavior, review student's decision-making process, etc. and provide both supportive and constructive feedback to assist them in developing their skills and competencies during the rotation. Help the student identify learning needs to achieve the expected levels of performance for the rotation.
6. **Observe for progression** in student performance throughout the rotation. If it is identified that a student is struggling in some areas or may not achieve the minimum level expected, a plan should be put in place. Contact the PEP Team at PEPadm@dal.ca.
7. At the end of the rotation assess performance for the **summative assessment** (i.e., evaluation of student achievement for the intended learning outcomes). This is a final assessment as to whether the student has met the learning outcomes at an expected level for the rotation.
8. **Document** observations and assessment (i.e., written assessment at midpoint and final) and discuss with the student. Provide evidence by documenting specific examples of student behaviors on the assessment form to justify the performance evaluation.

SECTION 6 - APPE ELECTIVE ROTATION

Expectations for Students Completing their Advanced Pharmacy Practice Experience (APPE) Elective Rotation

In this culminating elective experience students will have an opportunity to apply knowledge and skills gained during the pharmacy curriculum to non-traditional and specialized pharmacist roles and practices within the Canadian healthcare system. Students will need to be oriented to the practice setting and will require more guidance at the beginning of the rotation while they begin to complete assigned rotation projects and activities. As the rotation continues, students should be able to engage assigned tasks by identifying and managing their learning needs, with gradually less guidance and more independence and autonomy at an appropriate level of pharmacist supervision. Students are expected to take an active role in their learning by setting goals, taking initiative, seeking out learning opportunities and being self-directed.

In PHAR 4083 students are expected to consistently demonstrate a 4-5 level of performance on outcomes 1-4 while completing all required rotation activities by the end of the rotation, and consistently display the professional behaviors indicated (5).

Rotation Outcomes

The following outlines the five general outcomes that will be assessed during elective APPE rotation. Each outcome has associated outcome elements that further delineates the outcome, as well as behavior descriptions that help describe the specific behaviors students are expected to perform for the outcome elements. Preceptors will complete an assessment of student performance at midpoint and at the end of the rotation as a final assessment.

When completing the assessment form on ONE45, preceptors should indicate the level of performance the student has demonstrated for each outcome as observed during the rotation. If the outcome has not been observed by the time of the assessment, 'not assessed' can be assigned. **For each outcome, preceptors should provide a brief justification, including specific examples in the comments section of the form on ONE45, describing how the student has achieved the level of performance.**

Outcome (Outcome element)	Level 1	Level 2	Level 3	Level 4	Level 5	Not Assessed
Note: See behavior descriptions that make up each outcome element in the associated document.						
1. Scholar- Uses fundamental knowledge, integrates evidence, and makes sound decisions						
1.1 Identifies, develops, and uses fundamental knowledge required to participate in the placement setting	0	0	0	0	0	0
1.2 Integrates best available evidence to inform decisions related to their work	0	0	0	0	0	0
1.3 Makes and justifies decisions	0	0	0	0	0	0
Scholar Comments:						

2. Communicator – Communicates effectively						
2.1 Uses appropriate verbal and non-verbal communication skills that are appropriate to the audience and context	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.2 Effectively communicates in writing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communicator Comments:						
3. Collaborator – Collaborates effectively						
3.1 Works actively and effectively with individuals and team members within the practice setting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Collaborator Comments:						
4. Manager Leader – Manages time effectively while contributing to the practice setting						
4.1 Effectively prioritizes and manages their time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.2 Displays leadership in contributing to and enhancing the goals and objectives of the practice setting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Manager-Leader Comments:						
5. Professional* – Acts professionally						
5.1 Displays professional behavior and adheres to ethical standards	<input type="radio"/> Consistently demonstrates <input type="radio"/> Developing and demonstrating refinement <input type="radio"/> Inconsistently demonstrates					
5.2 Takes professional responsibility and accountability within scope of practice of a pharmacy student	<input type="radio"/> Consistently demonstrates <input type="radio"/> Developing and demonstrating refinement <input type="radio"/> Inconsistently demonstrates					
5.3 Displays initiative, self-directed learning, and commitment to excellence in pharmacy practice	<input type="radio"/> Consistently demonstrates <input type="radio"/> Developing and demonstrating refinement <input type="radio"/> Inconsistently demonstrates					
Professional Comments:						

* For this outcome, students early in their development may still be refining their professional attributes and behaviors. If a minor lapse in professionalism is observed by the preceptor or team, the preceptor should discuss the behavior and develop an action plan to address this. Specific details of the lapse should be documented on the assessment form. If the student shows improvement in their behaviors as outlined in the plan, students can be assessed as 'minor lapse and demonstrating refinement.' If the student does not demonstrate growth in the professional outcome, students should be assessed as 'inconsistently demonstrates'. Note: students may only demonstrate ONE minor lapse in professionalism during the rotation to be eligible to pass the rotation. In the case of concerning professionalism behaviors, please contact the PEP team as soon as the potential concern is identified: pepadm@dal.ca .

Behavior Descriptions for Outcome Elements

This table outlines the outcomes and their specific elements and associated behaviors that can be assessed during the rotation.

OUTCOME (Outcome Element)	BEHAVIOR DESCRIPTIONS
1. Scholar – Uses fundamental knowledge, integrates evidence, and makes sound decisions	
1.1 Identifies, develops, and uses fundamental knowledge required to participate in the placement setting	<ul style="list-style-type: none"> • Displays adequate knowledge (minimal gaps) for fundamental knowledge required for rotation activities • Initiates and undertakes appropriate learning to successfully diminish knowledge gaps
1.1 Integrates best available evidence to inform decisions related to their work	<ul style="list-style-type: none"> • Uses an appropriate search strategy to identify the best available resources for a given question or situation • Identifies and uses appropriate resources • Critically appraises, interprets, and analyzes information from resources to formulate responses and make decisions
1.2 Makes and justifies decisions	<ul style="list-style-type: none"> • Weighs the pros and cons of alternatives to make decisions or to select a course of action • Makes decisions using an evidence-informed approach • Logically defends decisions, chosen strategies, and/or recommendations • Applies experience and knowledge gained in the placement to better manage new tasks, situations and/or challenges
2 Communicator – Communicates effectively	
2.1 Uses appropriate verbal and non-verbal communication skills that are appropriate to the audience and context	<ul style="list-style-type: none"> • Communicates appropriately verbally, non-verbally, orally, in writing or via communication technology • Tailors communication to specific contexts and audiences • Speaks clearly, respectfully, and confidently using appropriate tone and pace • Demonstrates sensitivity, respect, empathy and inclusion in communications and interactions
2.2 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 • Uses appropriate language and tone for the type of written communication and intended audience • Expresses facts, evidence, opinions, positions, and recommendations accurately and effectively with clarity
3 Collaborator – Collaborates effectively	
3.1 Works actively and effectively with individuals and team members within the practice setting	<ul style="list-style-type: none"> • Establishes and maintains positive relationships • Recognizes and can negotiate shared and overlapping responsibilities • Participates in respectful and effective shared decision-making • Tries to integrate into the practice setting and team • Completes assigned work as agreed upon • Manages disagreements or conflicts in a way that supports collaborative culture

OUTCOME (Outcome Element)	BEHAVIOR DESCRIPTIONS
4 Manager Leader – Manages time effectively while contributing to practice setting	
4.1 Effectively prioritizes and manages their time	<ul style="list-style-type: none"> • Prioritizes and manages assigned workload • Adjusts to changes in workload • Meets assigned deadlines within expected timeframes
4.2 Displays leadership in contributing to and enhancing the goals and objectives of the practice setting	<ul style="list-style-type: none"> • Takes initiative in completing rotation activities • Identifies opportunities to contribute to organizational goals and objectives • Recognizes the importance of their effort and contribution to the organization
5 Professional – Acts professionally	
5.1 Displays professional behavior and adheres to ethical standards	<ul style="list-style-type: none"> • Displays honesty, integrity, humility and commitment, altruism, compassion, and respect for diversity • Is accessible, diligent, timely and reliable to others • Maintains appropriate interpersonal boundaries • Dresses appropriately and professionally • Maintains privacy and confidentiality • Applies standards of practice, policies, codes that govern the profession and practice setting
5.2 Takes professional responsibility and accountability within scope of practice of a pharmacy student	<ul style="list-style-type: none"> • Takes responsibility and accountability for actions and inactions • Seeks guidance when uncertain about knowledge, skills, abilities, or scope of practice • Fulfills responsibility for rotation activities/projects(s)
5.3 Displays initiative, self-directed learning, and commitment to excellence	<ul style="list-style-type: none"> • Takes initiative to learn, enhance and integrate knowledge and skills • Accepts, incorporates, and provides feedback in an effective and constructive manner • Sets personal goals to support development of professional skills, knowledge, and attitudes and self-assesses progress towards goals

Note: Outcomes, outcomes elements and behavior descriptors wording in the student performance assessment materials for the elective rotation are adapted from assessment instruments: University of Alberta⁷, University of Toronto⁸ and the Association of Faculty of Pharmacy Educational Outcomes for First Professional Degree Programs in Canada.¹⁰

References

1. Ozturk, E., Yeung, J., Dhaliwal, N., Fang, K., Lau, G., Mira, A., Taheri, A., et al. (2018). Assessment of Student Learning: A Guidebook for Practice Educators. Faculty Research and Publications. <https://open.library.ubc.ca/collections/facultyresearchandpublications/52383/items/1.03845C> Adapted with permission from the University of British Columbia, Office of Experiential Education, for use in the academic pharmacy program at Dalhousie University.
2. Carraccio, Carol L. MD, MA; Benson, Bradley J. MD; Nixon, L James MD; Derstine, Pamela L. PhD from the Educational Bench to the Clinical Bedside: Translating the Dreyfus Developmental Model to the Learning of Clinical Skills. *Academic Medicine* 2008; 83(8):761-767 doi: 10.1097/ACM.0b013e31817eb632
3. OPPCAT Developmental and Organizational Team. Ontario Pharmacy Patient Care Assessment Tool (OPPCAT) Glossary (2019)
4. Lester S. Novice to expert: the Dreyfus model of skill acquisition. Stan Lester Developments 2005. <https://www.yumpu.com/en/document/read/16740112/novice-to-expert-the-dreyfus-model-of-skill-acquisition-stan-lester->
5. Leslie Dan Faculty of Pharmacy, University of Toronto. Student Experiential Education Manual (2020-2021). Adapted with permission from the Leslie Dan Faculty of Pharmacy at the University of Toronto, 2021.
6. Kennie N, Dolovich L. Reliability testing of a case-leveling framework for assigning level of difficulty of pharmacist's initial patient medication assessments. *J Am Pharm Assoc* (2003);48(5):640-7. doi: 10.1331/JAPhA.2008.07081
7. Adapted with permission from the Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, 2021.
8. Association of Faculties of Pharmacy of Canada. Educational outcomes for first professional degree programs in pharmacy in Canada 2017. https://www.afpc.info/system/files/public/AFPC-Educational%20Outcomes%202017_final%20Jun2017.pdf

APPENDIX A

Skills Inventory

For the seven main outcomes that will be assessed during direct patient care rotations, considering main activities that will be completed during the rotation (refer to the course rotation manual), review the outcome elements and behavior descriptions and identity your level of confidence in completing the outcome elements/behaviors. Identity areas to work on during the rotation and write these as learning goals in your **Learning Plan**.

Outcome (Outcome element)	Behavior Descriptions	Confidence				
		Low		High		
		1	2	3	4	5
1. Care Provider: Provide patient care using the pharmacist's patient care process for uncomplicated patients focusing on therapeutic topics covered for the curriculum for the year of study (IPPE)						
1. Care Provider: Provide patient care using the pharmacist's patient care process for uncomplicated patients and more complicated patients (APPE)						
2.1 Assessment: Establishes and maintains professional relationships with patients/caregivers	<ul style="list-style-type: none"> Establishes a caring professional relationship with the patient centered on the patient's needs Exhibits sensitivity, respect and empathy with patients and caregivers Properly introduces themselves and establishes credibility and trust 	0	0	0	0	0
2.2 Assessment: Collects a complete and patient centered history including a medication history	<ul style="list-style-type: none"> Utilizes multiple sources of patient information to synthesize data to complete a patient history i.e., patient/family, pharmacy and medical records, clinical and drug databases, etc.) Employs effective interviewing techniques. (e.g., appropriate open and closed ended questions) Employs a systematic process to gather data accurately Gathers an appropriate amount of information Completes appropriate patient assessment as applicable (e.g., inhaler technique, lab tests, vital signs, etc.). Attempts to clarify and manage conflicting data Able to justify the significance of information gathered in relation to the patient 	0	0	0	0	0
2.3 Assessment: Identifies and prioritizes drug-therapy problems and health care needs	<ul style="list-style-type: none"> Synthesizes information to identify drug therapy problems and health care needs Assesses drug therapy for indication, efficacy, safety, and adherence to identify drug-therapy problems for areas already covered in the curriculum for the year of study Attempts to assess drug therapy and identify drug-therapy problems for therapeutics areas not covered in the curriculum with preceptor support Appropriately prioritizes and justifies drug therapy problems 	0	0	0	0	0

Outcome (Outcome element)	Behavior Descriptions	Confidence				
		Low		High		
		1	2	3	4	5
2.4 Care Plan: Develops a care plan, in collaboration with the patient/caregiver and other healthcare team members that addresses medication and health needs	<ul style="list-style-type: none"> In conjunction with the patient/caregiver/family and other health care providers: <ul style="list-style-type: none"> Establishes goals of therapy Identifies and assesses potential options to resolve each drug therapy problem and meet goals of therapy Makes a shared decision and provides rationale Develops a complete monitoring plan (i.e., what to monitor, who to monitor, when and how) 	0	0	0	0	0
2.5 Care Plan: Implements the care plan when appropriate	<p>Implements the care plan when appropriate:</p> <ul style="list-style-type: none"> Implements specific actions for managing medication specific needs (i.e., dispense, adapt, prescribe, administer, refer, deprescribe, order, etc.) Makes an appropriate recommendation to the patient/caregiver/family, prescriber, or health care provider Provides safe and effective patient education Communicates the agreed upon care plan and rationale to patients and/or health care providers Identifies when the patient's health care needs are outside of the pharmacist's scope requiring referral 	0	0	0	0	0
2.6 Follow Up: Provides follow up and evaluates care as appropriate	<ul style="list-style-type: none"> Provides follow up if possible Collects and interprets follow up information to evaluate efficacy and safety of the care plan implemented Identifies any new drug therapy problems that may be occurring 	0	0	0	0	0
3. Communicator – Communicates effectively						
2.1 Uses appropriate verbal and non-verbal communication skills that are appropriate to the audience and context	<ul style="list-style-type: none"> Communicates appropriately verbally, non-verbally, in writing or via communication technology with patients, the pharmacy and health care team Is able to tailor communication to specific contexts and audiences Speaks clearly, respectfully, and confidently using appropriate tone and pace Demonstrates sensitivity, respect, empathy and inclusion in communications and interactions 	0	0	0	0	0
2.3 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 Writing is clear, accurate, organized, concise and audience-appropriate Ensures that records of care, actions and decisions are documented in the patient record Documentation is timely and fulfills professional and legal requirements 	0	0	0	0	0

Outcome (Outcome element)	Behavior Descriptions	Confidence				
		Low		High		
		1	2	3	4	5
6. Scholar – Uses fundamental knowledge, integrates evidence, and makes sound decisions						
6.1 Identifies and uses fundamental knowledge required for pharmacists	<ul style="list-style-type: none"> Displays adequate knowledge (minimal gaps) for common conditions seen at the rotation site for therapeutic topics covered in the curriculum for the year of study Identifies and fulfills learning needs for therapeutic topics not or not yet covered in the curriculum for the year of study Applies knowledge to patient care and pharmacy services 	0	0	0	0	0
6.2 Integrates best available evidence when providing advice and patient care	<ul style="list-style-type: none"> Uses an appropriate search strategy to identify the best available resources for a given question or situation Identifies and uses appropriate resources Critically appraises, interprets, and analyzes information from resources to formulate responses, make decisions and provide recommendations/advice Integrates best available evidence into patient care decisions 	0	0	0	0	0
3.4 Makes and justifies clinical decisions	<ul style="list-style-type: none"> Takes an active role in discussions involving decision making Uses available information, therapeutic knowledge, problem solving and professional judgement to arrive at recommendations and decisions that are appropriate, accurate and practical Able to articulate and justify a recommendation and decision 	0	0	0	0	0
7. Collaborator – Collaborates effectively						
7.1 Fulfills professional roles and responsibilities within the team	<ul style="list-style-type: none"> Recognizes and respects the unique and shared roles and responsibilities of pharmacy and health care team members Able to articulate pharmacist's role and responsibilities in the practice setting within the team Fulfills professional role within the scope of practice of a pharmacy student 	0	0	0	0	0
7.2 Works effectively with members of the health care team including pharmacy staff, health care providers and patients/caregivers	<ul style="list-style-type: none"> Establishes and maintains positive relationships with patients, pharmacy teams members and other health care providers Recognizes and can negotiate shared and overlapping responsibilities Participates in respectful, effective shared decision-making Determines when and how care should be handed over to another team member Makes an effort to integrate into team 	0	0	0	0	0

Outcome (Outcome element)	Behavior Descriptions	Confidence				
		Low		High		
		1	2	3	4	5
8. Manager Leader – Contributes to the medication distribution process (IPPE)						
5. Manager Leader – Contributes to the medication distribution process and displays leadership in the practice (APPE)						
6.2 Prepares and dispenses medications accurately and safely (<i>IPPE and APPE in community</i>)	<ul style="list-style-type: none"> Demonstrates a basic understanding of and participates in all aspects of the medication dispensing process as applicable to the setting Accurately compounds dosage forms when possible Accurately performs pharmaceutical calculations Verify the technical aspects of prescriptions Recognizes factors and processes required for safe and efficient medication distribution 	0	0	0	0	0
6.3 Displays leadership in contributing to and enhancing pharmacy practice in the setting (<i>APPE</i>)	<ul style="list-style-type: none"> Recognizes the importance of their effort and contribution to the organization Demonstrates initiative and identifies opportunities to contribute to organizational goals, objectives and/or services Actively participates in practice-based initiatives where available (i.e., projects, discussions, presentations, quality assurance) to improve the quality of care, pharmacy practice or organizational practice 	0	0	0	0	0
7 Health Advocate – Advocates for health needs						
7.1 Identifies the health needs of patients	<ul style="list-style-type: none"> Identifies and recognizes the effects of social determinants of health in the public and community for the practice population Assists patients in accessing needed health services or resources Describes and fulfills advocacy roles within the practice setting 	0	0	0	0	0
7.2 Promotes the health and well-being of individual patients and communities (<i>APPE in Community</i>)	<ul style="list-style-type: none"> Incorporates disease prevention and health promotion into interactions with individual patients Participate in health promotion or disease prevention programs 	0	0	0	0	0
8 Professional – Acts professionally						
7.1 Displays professional behavior and adheres to ethical standards	<ul style="list-style-type: none"> Displays honesty, integrity, humility and commitment, altruism, compassion and respect for diversity and patient autonomy Is accessible, diligent, timely and reliable to others Maintains appropriate interpersonal boundaries Dresses appropriately and professionally Maintains privacy and confidentiality 	0	0	0	0	0

Outcome (Outcome element)	Behavior Descriptions	Confidence				
		Low		High		
		1	2	3	4	5
	<ul style="list-style-type: none"> Adheres to the code of ethics applicable to their jurisdiction Demonstrates awareness of laws, standards of practice, policies and codes that govern the self-regulated profession of pharmacy 					
7.4 Takes professional responsibility and accountability within scope of practice of a pharmacy student	<ul style="list-style-type: none"> Takes responsibility and accountability for actions and inactions Seeks guidance when uncertain about knowledge, skills, abilities, or scope of practice Prioritizes activities and manages time to balance rotation requirements and practice site workflow Demonstrates a commitment to patient safety and quality improvement Applies standards of practice, policies and codes that govern the profession and practices within the student's scope of practice 	0	0	0	0	0
7.5 Displays initiative, self-directed learning, and commitment to excellence in pharmacy practice	<ul style="list-style-type: none"> Takes initiative to learn, enhance and integrate knowledge and skills Accepts, incorporates, and provides feedback in an effective and constructive manner Sets personal goals to support development of professional skills, knowledge, and attitudes 	0	0	0	0	0