

## Guide to the Assessment of Student Performance in relation to Patient or Task Complexity in the Collaborative Health Care (CHC) Advanced Pharmacy Practice Experience (APPE)

In the CHC APPE students will be working on refining their knowledge and skills to provide care for **uncomplicated and more complicated patients with some higher complexity factors** during the rotation. It is important to note that students should achieve an entry to practice level of competency by the end of the rotation and are not expected to competently and effectively manage highly complex or complicated patients without some preceptor guidance. This summary provides a description of considerations for case and task complexity.



The preceptor and student can assess a **patient's complexity** using the criteria in **Table 1** below to assist in selecting appropriate patients for rotation activities. **Patient complexity may be high in some practice settings. In this case it would be appropriate for students to be assigned to review a single medical condition or a routine aspect of a complex patient's care to reduce the complexity of the situation.** In the initial weeks of the rotation, patients of lower complexity can be selected for students and then the level of complexity of the patient or situation can gradually increase as the rotation progresses. The student's ability to handle complexity will also depend on the amount of exposure and repetition in providing care of patients at a higher complexity.

**Table 1. Patient Complexity Factors**

UNCOMPLICATED - Lower Complexity Factors	Higher Complexity Factors	COMPLICATED – * Highly Complex
<ul style="list-style-type: none"> <li><input type="checkbox"/> Patient is taking a low number of medications and/or has a few current medical conditions (i.e., 1-2 active)</li> <li><input type="checkbox"/> All patient-related factors are present and easily interpreted</li> <li><input type="checkbox"/> The issue or problem is routine in the practice setting</li> <li><input type="checkbox"/> Management of the problem is straightforward and clear treatment guidelines are available</li> <li><input type="checkbox"/> Prioritization of drug therapy problems is straightforward</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Patient is taking multiple medications and has multiple current medical conditions (i.e., &gt;3-5)</li> <li><input type="checkbox"/> Some patient factors are not present or unclear requiring interpretation and inferences to be made</li> <li><input type="checkbox"/> The issue or problem is not commonly encountered in the practice setting</li> <li><input type="checkbox"/> 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)</li> <li><input type="checkbox"/> Patient has complexities (i.e., communication barriers, ethical issues, patient affect, cognition, or attitude)</li> <li><input type="checkbox"/> Multiple drug therapy problems exist, and prioritization may be complicated</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Multiple higher complexity factors exist and/or are co-dependent</li> </ul>

Adapted from: 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

**\* Note: Students are not expected to manage highly complex patients in the practice setting without some guidance by the preceptor.**

The **level of complexity of pharmacy service tasks** should also be taken into consideration.

Preceptors may consider assigning students more focused tasks (i.e., BPMH, med rec on admission, medication order review, patient education, screening for VTE., renal drug dosing) to students at the beginning of the rotation to help develop their competence and confidence and then gradually increasing the level of complexity of the task (i.e. medication discharge reconciliation and counselling, full patient care work up).

Following orientation to the assigned unit/setting, students should begin to work up and follow a minimum of 1-2 patients per week, and during the rotation this should progress to the student gradually taking on more patients and patients with more complexity within their caseload. The number of patients assigned to the student as a caseload will depend on patient complexity, patient turnover in the setting and time needed for completion of other rotation activities.

**Table 2** 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, highlighting the expectations for the level of complexity of patients or tasks assigned to students. At the end of the CHC APPE rotation students should achieve a level 4-5 for caring for uncomplicated or more complicated patients.



**Table 2. 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 <b>not able to deal with complexity</b> ; is only able to perform the activity with <u>significant</u> guidance	Student has a working understanding of knowledge, skills or behaviors associated with this outcome; sees actions as steps and is <b>starting to appreciate complex situations but is only able to achieve some steps using own judgement</b> ; takes initiative readily; is able to perform the activity with <u>some</u> guidance	Student has a good working understanding of knowledge, skills or behaviors associated with this outcome but may lack refinement; <b>able to engage in more complex situations</b> ; uses judgement appropriately; is able to perform the activity with <u>minimal</u> guidance	Student has a deeper understanding of knowledge, skills or behaviors associated with outcome and can independently perform the task; <b>deals with complex situations holistically and more confident in decision making</b> ; consistently takes initiative and full responsibility	The student has not yet been directly observed completing the outcome

In the case where students have been working with multiple preceptors or team members during the rotation, preceptors should collaborate on the final assessment to provide a reflection of the student's overall progress and performance.



**Situations where students are progressing WELL related to complexity during the rotation:**

- Able to assess and manage uncomplicated or routine patients or tasks and progress to be able manage patients or tasks at a higher level of complexity as they engage repetitively in assigned tasks.
- If students are spending time in more than one practice setting (i.e. patient unit), they are likely to require time and orientation to each practice area to develop knowledge and skills to care for more complicated patients with minimal guidance.
- Able to engage in more complex situations but when dealing with HIGHLY complex patients (see complexity factors) may need SOME guidance in refining DTPS or making interventions specific to the context of the practice setting.



**Situations where students are NOT progressing related to complexity well during the rotation:**

- Able to assess and manage uncomplicated or routine patients or tasks, but not able adequately assess or manage patients or tasks that are more complicated (some higher complexity factors) despite engaging repetitively in assigned tasks following time and orientation to the practice area. NOTE: students should be exposed to both uncomplicated and more complicated patients during the rotation.
- Not able to identify and address knowledge gaps or complete adequate assessment of the patient to care for uncomplicated or more complicated patients or tasks despite spending time in one practice setting.