

Canadian Pharmacy Residency Board (CPRB)

Ranges of Contexts and Activities and Expected Levels of Performance for Residents in Accredited Canadian Pharmacy Residency Programs

Supplement to the Accreditation Standards for Pharmacy (Year 1) Residencies (2018)

and

Accreditation Standards for Advanced (Year 2) Pharmacy Residencies (2016)

March 31, 2020

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A resource produced by the Association of Faculties of Pharmacy of Canada (AFPC), entitled *Levels of Performance Expected of Students Graduating from First Professional Degree Programs in Pharmacy in Canada* (2011), was also consulted in an effort to place performance expectations for pharmacy residents on a continuum beginning with entry-to-practice pharmacy training. The AFPC document is available at:

 $\frac{http://www.afpc.info/sites/default/files/EO\%20Levels\%20of\%20Performance\%20May\%202011\%20AFPC\%20}{Council.pdf}$

The terms coordinator, department, organization, pharmacist, preceptor, and resident, where expressed in singular, shall also be read as plural.

Background and Purpose

In 2016 and 2018, the Canadian Pharmacy Residency Board (CPRB) published accreditation standards for Year 2 and Year 1 pharmacy residency programs, respectively, which also described the competencies, or educational outcomes, of pharmacy residents upon graduation from such programs.

Through feedback solicited by the CPRB, it has become clear that residency stakeholders across the country desire greater clarity about the practical application of these standards to resident learning and development, particularly where multiple programs and/or levels of training coexist. In response to this feedback, the CPRB has prepared this supplementary document, which includes more specific descriptions of the levels of performance expected for each competency.

The main purpose of this supplementary document is to describe in more detail the performance expectations for Year 1 and Year 2 residents by the end of their residency programs. It was created to inform program evaluation, curricular mapping and planning, and the development of instructional and assessment tools for preceptors. It was not designed to serve as an assessment tool itself; rather, it is intended as a reference point for resident performance. In addition, this document contributes to standardization of residency program outputs, such that a residency graduate's skills and abilities can be assumed to be relatively consistent regardless of the location of training. Finally, this document is not a CPRB accreditation tool, and residency programs will continue to be judged only against the standards themselves.

Starting on page 6, below, the Ranges of Contexts and Activities and Expected Levels of Performance for each residency year are presented in full, to allow readers to review the items for each year independently. By intention, the items listed may be very similar (and occasionally redundant) between the years. Furthermore, concepts that are similar between Year 1 and Year 2 are presented side by side to demonstrate the continuum of learning and to facilitate comparison.

Definitions

In this document, the Ranges of Contexts and Activities are described in general terms, while specific activities are described in detail in the Expected Levels of Performance. Please see the model diagram (page 4). Ranges of Contexts and Activities are defined as the suggested scopes or extents of activities or clinical circumstances where each standard is usually applied. Ranges of Contexts and Activities include considerations such as (1) the **degree of complexity** (i.e., complex versus non-complex) and (2) the **degree of commonality** (i.e., common versus uncommon). Year 2 programs will offer broader Ranges of Contexts and Activities than Year 1 programs. It is important to note that the terms "complex"/"non-complex" and "common"/"uncommon" are used in this document to modify multiple activities and entities, including patients, drug therapy problems, patient interactions, and drug reviews.

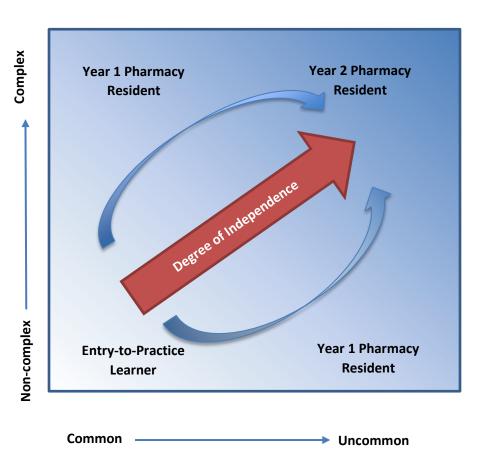
Expected Levels of Performance are defined as the minimal measures or degrees of expected performance in carrying out the particular activity in the clinical circumstances, as defined in the Ranges of Contexts and Activities, at the end of the residency program. The Expected Levels of Performance are frequently delineated by the **degree of independence**, also described as the **amount of guidance** (i.e., significant guidance, some guidance, minimal guidance, no guidance/independent) required by the resident to complete the activity. It was not the authors' intent, particularly for the Expected Levels of Performance, to describe all activities that may occur in the defined Ranges of Contexts and Activities for each standard; rather, the intention was to describe the Expected Levels of Performance with respect to various activities aligning with the accreditation standards. It is also important to note that the degree of commonality (as described in the preceding paragraph) may change as the degree of independence increases. For example, Year 1 residents may be expected to manage common drug therapy problems with *minimal* guidance, whereas Year 2 residents may be expected to manage both common and uncommon drug therapy problems (a broadening of the range) *independently* (a change in the level of performance). This means that the Ranges of Contexts and Activities may broaden as the level of independence increases.

A three-dimensional model was created to convey the authors' understanding of the interrelationship between the concepts of complexity and commonality in the context of Year 1 and Year 2 residencies, with the third dimension being depicted by the large arrow labeled as degree of independence. For purposes of the figure below, this three-dimensional model is represented in a two-dimensional figure with four quadrants, but the quadrant groupings are not mutually exclusive. For example, an entry-to-practice (undergraduate) learner might be exposed to complex, uncommon cases, but would require significant guidance to work up such cases, whereas a Year 2 resident might be exposed to common, non-complex cases, and should be able to work up those cases independently.

1. CPRB acknowledges the OPPCAT Development and Oversight Team for the adaptation of these guidance terms.

Pharmacy Learner Model of Ranges of Contexts and Activities and Expected Levels of Performance

Ranges of Contexts and Activities – Degree of Complexity



Ranges of Contexts and Activities – Degree of Commonality

Note: Degree of independence determines the Expected Level of Performance.

The vertical and horizontal axes in the model represent the elements of Ranges of Contexts and Activities (i.e., the degree of complexity and the degree of commonality, respectively). The arrow in the centre of the diagram depicts the amount of independence corresponding to the Expected Level of Performance.

How to Use This Document

This document is intended to serve as a guide for discussions between residency coordinators and preceptors, to clearly define the particular residency end point at the local level. The specific definitions and constituents of a common versus an uncommon problem, patient, disease state, patient conversation, drug review, etc., or a non-complex versus a complex problem, patient, disease state, patient conversation, drug review, etc., would be determined at the local level (i.e., residency program, site, or even clinical unit, as appropriate).

| EVIDENCE-BASED PATIENT CARE | |
|--|--|
| YEAR 1 | YEAR 2 |
| 3.1 Provide Evidence-Based Patient Care as a Member of Interprofessional Teams | 3.1 Provide Evidence-Based Direct Patient Care as a Member of Interprofessional Teams |
| The resident shall be proficient in providing evidence-based pharmacy care as a member of interprofessional teams. | The resident shall demonstrate expertise in providing evidence-based pharmacy care as a member of interprofessional teams in the residency's defined area of practice. |

| RANGES OF CONTEXTS AND ACTIVITIES IN WHICH THE RESIDENT IS EXPECTED TO DEMONSTRATE ACHIEVEMENT OF OUTCOME | | |
|---|---|--|
| Pharmacy (Year 1) Residency | Advanced (Year 2) Pharmacy Residency | |
| The resident: | The resident: | |
| 1. Provides pharmacy care to <i>selected</i> patients with <i>common</i> disease states. | 1. Provides pharmacy care to <i>all</i> assigned patients, including those with <i>complex</i> disease states. | |
| 2a. Uses critical appraisal to help support clinical decision-making. | 2. Uses critical appraisal to help support clinical decision-making and makes clinical decisions in cases with limited or conflicting evidence. | |
| 2b. Self-identifies any supports required to assist in his/her provision of patient care for <i>uncommon</i> drug therapy problems. | | |
| 3. Works collaboratively within interprofessional teams. | 3. Works collaboratively within interprofessional teams. | |
| 4. Not applicable | 4. Assumes full responsibility for a patient care area, incorporating a system-wide approach to patient management. | |
| 5. Advocates for patients. | 5. Advocates for patients and patient groups. | |

| EXPECTED LEVELS OF PERFORMANCE | | |
|---|--|--|
| Expected Level of Performance upon Completion of a Pharmacy (Year 1) Residency | Expected Level of Performance upon Completion of an Advanced (Year 2) Pharmacy Residency | |
| Consistently, accurately, and with minimal guidance from preceptors, the resident: | Consistently, accurately, and <i>independently</i> , the resident: | |
| Gathers critical information from appropriate sources with proficiency and efficiency. | Gathers critical information from all appropriate sources with proficiency and efficiency. | |
| 2. Efficiently communicates with patients, families, and/or care team members in usual situations. | 2a. Efficiently communicates with patients, families, and/or care team members. | |
| situations. | 2b. Adapts communication style and process with patients, families, and/or care team members in unique or challenging situations. | |
| 3a. Utilizes a framework to identify and prioritize <i>most</i> relevant drug therapy problems. | 3a. Utilizes a framework to identify and prioritize <i>all</i> relevant drug therapy problems. | |
| 3b. Demonstrates an analytical problemsolving approach for <i>common</i> drug therapy problems. | 3b. Demonstrates an analytical problem-solving approach for <i>uncommon</i> drug therapy problems. | |
| 4. Determines appropriate goals, end points, and outcomes. | 4. Determines appropriate goals, end points, and outcomes. | |
| 5. Considers <i>most</i> relevant alternatives to manage drug therapy problems. | 5. Considers <i>all</i> relevant alternatives to manage drug therapy problems. | |
| 6. Selects and defends an appropriate management strategy for <i>common</i> drug therapy problems. | 6. Selects and defends an appropriate management strategy for <i>all</i> relevant drug therapy problems. | |
| 7. Provides timely and effective resolution of <i>common</i> drug therapy problems. | 7. Provides timely and effective resolution of <i>all</i> relevant drug therapy problems. | |
| 8. Proactively monitors drug therapy outcomes related to interventions for <i>common</i> drug therapy problems. | 8. Proactively monitors drug therapy outcomes related to interventions for <i>all</i> relevant drug therapy problems. | |
| 9. Applies patient information and critical appraisal of the literature to design a care plan that is appropriate and reflects current standards of practice. | 9a. Analyzes patient information and uses critical appraisal of the literature to design a care plan that is appropriate and reflects current standards of practice. | |

| EXPECTED LEVELS OF PERFORMANCE | |
|---|---|
| Expected Level of Performance upon Completion of a Pharmacy (Year 1) Residency | Expected Level of Performance upon Completion of an Advanced (Year 2) Pharmacy Residency |
| | 9b. Designs a care plan that is appropriate in cases of limited and/or conflicting evidence. |
| 10. Proactively communicates medication issues to the prescriber and/or patient and makes recommendations to resolve the issues. | 10. Proactively communicates medication issues to the prescriber and/or patient and makes recommendations to resolve the issues. |
| 11. Proactively intervenes with the patient, caregivers, and/or immediate care team to resolve or prevent actual or potential issues. | 11. Proactively intervenes with the patient, caregivers, and/or immediate care team to resolve or prevent actual or potential issues. |
| 12. Revises care plans on the basis of new information. | 12. Revises care plans on the basis of new information. |
| 13. Provides continuity of care (e.g., provides patient handover when a patient is transferred to/from another area or to/from the community in order to provide seamless care throughout a patient's care trajectory). | 13. Provides continuity of care (e.g., provides patient handover when a patient is transferred to/from another area or to/from the community in order to provide seamless care throughout a patient's care trajectory). |
| 14. Documents care provided in a professional and timely manner. | 14. Documents care provided in a professional and timely manner and adapts documentation style to the needs of the patient care area/team. |
| 15. Performs comprehensive medication reconciliation. | 15. Performs comprehensive medication reconciliation. |
| 16. Assumes approximately half of a typical pharmacist's direct patient care activities. | 16. Assumes the majority of a typical pharmacist's direct patient care activities. |
| 17. Selects appropriate patients for initial assessment and follow-up. | 17. Selects and prioritizes appropriate patients, based on acuity and pharmacy care needs, for initial assessment and follow-up. |
| 18. Works respectfully, cooperatively, and collaboratively with other healthcare providers in the provision of direct patient care. | 18. Works respectfully, cooperatively and collaboratively with other healthcare providers in the provision of direct patient care. |
| 19. Recognizes his/her own role, limitations, and responsibilities within interprofessional teams. | 19a. Fully realizes his/her role within interprofessional teams. |

| EXPECTED LEVELS OF PERFORMANCE | |
|--|---|
| Expected Level of Performance upon Completion of a Pharmacy (Year 1) Residency | Expected Level of Performance upon Completion of an Advanced (Year 2) Pharmacy Residency |
| | 19b. Conducts complex conversations with other healthcare professionals or patients to prevent and resolve conflicts. |
| 20. Demonstrates a professional, patient-centred, team-oriented approach. | 20a. Demonstrates a professional, patient-centred, team-oriented approach. |
| | 20b. Is able to integrate systems issues into clinical practice and/or practices at full scope of practice. |
| 21. Makes decisions that are informed by the patient's interests and needs. | 21. Makes decisions that are informed by the patient's interests and needs. |
| 22. Advocates for the patient's well-being. | 22. Advocates for the well-being of patients and groups of patients at an individual and system level. |

| MEDICATION-USE SYSTEMS | |
|--|---|
| YEAR 1 | YEAR 2 |
| 3.2 Manage and Improve Medication-Use Systems | 3.2 Manage and Improve Medication-Use Systems |
| The resident shall demonstrate a working knowledge of medication-use systems, as well as the roles of pharmacy personnel and other care providers within the system, in order to manage and improve medication use for individual patients and groups of patients. | The resident shall contribute to the improvement of medication-use systems and pharmacy services in healthcare teams, organizations, and systems. |

| RANGES OF CONTEXTS AND ACTIVITIES IN WHICH THE RESIDENT IS EXPECTED TO DEMONSTRATE ACHIEVEMENT OF OUTCOME | | |
|---|---|--|
| Pharmacy (Year 1) Residency | Advanced (Year 2) Pharmacy Residency | |
| The resident: | The resident: | |
| 1. Is able to process <i>common</i> medication orders (if applicable). | 1. Is able to process medication orders (if applicable).* | |
| 2. Solves problems and recognizes when additional support is required. | 2. Solves <i>complex</i> problems and recognizes when additional support is required. | |
| 3. Appropriately manages problems related to the medication-use system (e.g., missing medications, formulary management, administration time issues) in order to optimize patient care and/or safety. | 3. Appropriately manages problems related to the medication-use system (e.g., missing medications, formulary management, administration time issues) in order to optimize patient care and/or safety. | |
| 4. Recognizes the roles of others and works collaboratively within interprofessional teams. | 4. Recognizes the roles of others and works collaboratively within interprofessional teams. | |
| 5. Incorporates patient safety practices into medication management. | 5. Incorporates patient safety practices into medication management. | |
| 6. Recognizes medication errors and responds to them. | 6a. Engages in continuous quality improvement activities by recognizing, disclosing, and responding to errors, adverse events, and near misses. | |

| RANGES OF CONTEXTS AND ACTIVITIES IN WHICH THE RESIDENT IS EXPECTED TO DEMONSTRATE ACHIEVEMENT OF OUTCOME | |
|---|--|
| Pharmacy (Year 1) Residency | Advanced (Year 2) Pharmacy Residency |
| | 6b. Identifies shortcomings of the existing medication-use system and proposes/executes changes (e.g., tools, order sets, pathways) to the medication-use system in order to improve patient care and/or safety. |

^{*}Medication order processing is not described in the Year 2 accreditation standards, but programs may include this activity in their respective curriculums. The specific level of performance would be at the discretion of the program and/or preceptor.

| EXPECTED LEVELS OF PERFORMANCE | |
|---|--|
| Expected Level of Performance upon Completion of a Pharmacy (Year 1) Residency | Expected Level of Performance upon Completion of an Advanced (Year 2) Pharmacy Residency |
| The resident: | The resident: |
| 1. Clearly and comprehensively describes the components and operations of the drug distribution system and medication prescribing processes within the healthcare organization. | 1. Assume Year 2 resident can already achieve. |
| 2. Clearly explains the elements of a safe medication-use system in accordance with the policies and procedures of the institution (e.g., preparation of sterile products, management of narcotics and other controlled drugs). | 2a. Recognizes patient safety issues and assesses them, including factors that influence the provision of services and decision-making. 2b. Considers multiple inputs involved in enhancing the quality of the medication-use system (e.g., health informatics, human and system factors). |
| 3. Clearly explains opportunities for quality improvement in the medication-use system (e.g., informatics-related tools, preprinted order sets). | 3a. With minimal guidance, makes recommendations, develops tools (e.g., protocols, formulary write-ups, order sets, pathways), and implements these recommendations and tools. 3b. Works collaboratively with patients, families, and other healthcare professionals to improve medication use. |

| | EXPECTED LEVELS OF PERFORMANCE | |
|----|---|---|
| C | Expected Level of Performance upon ompletion of a Pharmacy (Year 1) Residency | Expected Level of Performance upon Completion of an Advanced (Year 2) Pharmacy Residency |
| | | 3c. Consistently, effectively and with minimal guidance utilizes health informatics to improve quality of care and patient safety. |
| 4. | Collects all necessary information in order to consistently and independently assess <i>common</i> medication orders (e.g., preprinted order sets that are used on a daily basis) for accuracy, appropriateness, and adherence to the institution's policies and practices. | 4. Collects all necessary information in order to consistently and independently assess <i>all</i> medication orders (e.g., preprinted order sets that are utilized on a daily basis) for accuracy, appropriateness, and adherence to the institution's policies and practices. |
| 5. | Demonstrates a working knowledge of medication-use system processes, including validation, entry, and dispensing of orders to institution standards. | 5. Assume Year 2 resident can already achieve. |
| 6. | Consistently, comprehensively, and with some guidance applies principles of medication-use systems to solve patient-level problems related to the medication-use system. | 6. Consistently, comprehensively, and with minimal guidance applies principles of medication-use systems to solve patient-level problems related to the medication-use system. |

| LEADERSHIP | |
|--|---|
| YEAR 1 | YEAR 2 |
| 3.3 Exercise Leadership | 3.3 Exercise Leadership |
| The resident shall apply leadership and management skills to the professional practice environment in which the residency program is operated. | The resident shall demonstrate leadership in professional practice. |

| RANGES OF CONTEXTS AND ACTIVITIES IN WHICH THE RESIDENT IS EXPECTED TO DEMONSTRATE ACHIEVEMENT OF OUTCOME | | |
|--|--|--|
| Pharmacy (Year 1) Residency | Advanced (Year 2) Pharmacy Residency | |
| The resident: | The resident: | |
| 1. Demonstrates knowledge and understanding of administration with respect to <i>common</i> and <i>non-complex</i> administrative issues/dilemmas. | 1. Applies his/her administration knowledge with respect to <i>common</i> and <i>non-complex</i> administrative issues/dilemmas. | |
| 2. Demonstrates professional advocacy and leadership skills within the pharmacy department, organization, and profession. | 2. Demonstrates professional advocacy and leadership skills within the pharmacy department, organization, and profession. | |
| 3. Not applicable. | 3. Demonstrates advancement of the profession through scholarly activity. | |

| EXPECTED LEVELS OF PERFORMANCE | |
|--|--|
| Expected Level of Performance upon | Expected Level of Performance upon Completion |
| Completion of a Pharmacy (Year 1) | of an Advanced (Year 2) Pharmacy Residency |
| Residency | |
| The resident: | The resident: |
| Outlines change management principles and participates in their application. | 1. With some guidance, initiates, leads, or facilitates improvement in the pharmacy department or defined area of practice using quality improvement and change management principles. |
| 2. Articulates the difference between management and leadership. | 2. Assumes the role of leader, manager, or follower, as appropriate. |

| | EXPECTED LEVELS OF PERFORMANCE | | |
|----|---|--|--|
| | Expected Level of Performance upon Completion of a Pharmacy (Year 1) Residency | Expected Level of Performance upon Completion of an Advanced (Year 2) Pharmacy Residency | |
| 3. | With some guidance, effectively, articulately, and appropriately defends pharmacy-specific practices and policies when conflict arises. | 3a. Independently, effectively, articulately, and appropriately defends pharmacy-specific practices and policies when conflict arises. 3b. In situations of competing priorities or conflict, and guided by his/her commitment to quality improvement of patient care and safety: (i) Establishes agreement between parties, builds consensus, and develops partnerships. (ii) Identifies further required actions and executes them. (iii) Recognizes the role of compromise. | |
| 4. | With some guidance, is able to address administrative issues/dilemmas in order to improve patient care and safety by:a. Effectively assessing the problem at hand.b. Articulating alternatives and constructive proposals for resolution. | 4. With minimal guidance, is able to address administrative issues/dilemmas in order to improve the value of pharmacy care or healthcare delivery and enhance pharmacy service outcomes by: a. Effectively assessing the problem at hand. b. Articulating alternatives and constructive proposals for resolution. | |
| 5. | Demonstrates leadership by:a. Articulating a personal statement or philosophy of practice appropriate to diverse audiences.b. With some guidance, leading smaller project(s) to a designated end point. | 5. Demonstrates leadership by:a. Articulating a personal statement or philosophy of practice appropriate to diverse audiences.b. With minimal guidance, leading smaller project(s) to a designated end point. | |
| 6. | With some guidance, recognizes the ethical principles involved in dilemmas that the resident encounters, and demonstrates consistent and logical reasoning to resolve them. | 6. With minimal guidance, recognizes the ethical principles involved in dilemmas that the resident encounters, and demonstrates consistent and logical reasoning to resolve them. | |
| 7. | Demonstrates character in carrying out his/her role in a way that reflects positively on the profession. | 7. Demonstrates character in carrying out his/her role in a way that reflects positively on the profession. | |
| 8. | Takes action to implement decisions in a timely manner. | 8. Takes action to implement decisions in a timely manner. | |

| EXPECTED LEVELS OF PERFORMANCE | |
|------------------------------------|--|
| Expected Level of Performance upon | Expected Level of Performance upon Completion |
| Completion of a Pharmacy (Year 1) | of an Advanced (Year 2) Pharmacy Residency |
| Residency | |
| 9. Not applicable. | 9. Demonstrates leadership through scholarly writing, peer review, or review of award submissions. |
| 10. Not applicable. | 10. Serves as a role model/future leader in advancing the profession and the healthcare system. |

| MANAGEMENT OF ONE'S OWN PRACTICE | |
|--|---|
| YEAR 1 | YEAR 2 |
| 3.4 Exhibit Ability to Manage One's Own Practice of Pharmacy | |
| The resident shall apply skill in the management of his/her own practice of pharmacy, to advance his/her own learning, to advance patient care, and to contribute to the goals of the program, department, organization, and profession. | Although this is not explicit in Year 2 standards, the Year 2 resident is expected to meet this standard. |

| RANGES OF CONTEXTS AND ACTIVITIES IN WHICH THE RESIDENT IS EXPECTED TO DEMONSTRATE ACHIEVEMENT OF OUTCOME | |
|--|--|
| Pharmacy (Year 1) Residency | Advanced (Year 2) Pharmacy Residency |
| The resident: | |
| 1. Employs reflective and assessment skills to respond to practice demands and practice-related learning needs and ultimately takes responsibility for his/her learning, professional development, and self-care/wellness. | Although this competency is not described explicitly in the Year 2 standards, the Year 2 resident is expected to meet this competency. |
| 2. Demonstrates effective time- and resource- management skills to allow him/her to balance multiple competing priorities while achieving set objectives. | |
| 3. Actively participates in initiatives to improve patient care, the pharmacy department, the institution, and the profession. | |

| | EXPECTED LEVELS OF PERFORMANCE | | |
|-----|---|--|--|
| C | Expected Level of Performance upon completion of a Pharmacy (Year 1) Residency | Expected Level of Performance upon Completion of an Advanced (Year 2) Pharmacy Residency | |
| Th | ne resident: | | |
| 1. | With minimal guidance, develops achievable personal learning goals and objectives, along with clear outcome indicators for success. | Although this competency is not described explicitly in the Year 2 standards, the Year 2 resident is expected to meet this competency. | |
| 2. | With minimal guidance, effectively and accurately self-assesses practice-related learning needs and responds to practice demands as a foundation for planning continuous professional development. | | |
| 3. | Is aware of his/her own limitations and regularly seeks feedback and acts to improve behaviour. | | |
| 4. | Takes responsibility for his/her own learning. | | |
| 5. | Contributes to the goals of the program, department, organization, and profession through provision of clear, honest, and meaningful feedback to others. | | |
| 6. | With minimal guidance, consistently engages in effective reflective practice and applies this to personal learning. | | |
| 7. | Displays a sense of responsibility and independence by managing time, responsibilities, and priorities in an appropriate manner in order to complete tasks to an acceptable level in an appropriate time frame. | | |
| 8. | Establishes a healthy work-life balance and asks for help when needed. | | |
| 9. | Contributes to the mission, vision, or goals of the department, the institution, and the profession. | | |
| 10. | Demonstrates confidence/skill in having effective conversations in <i>common</i> scenarios. | | |

| EDUCATION | |
|---|---|
| YEAR 1 | YEAR 2 |
| 3.5 Provide Medication- and Practice-Related Education | 3.4 Provide Medication- and Practice-Related Education |
| The resident shall effectively respond to medication- and practice-related questions, and shall educate others. | The resident shall effectively respond to medication- and practice-related questions, and educate others. |

| RANGES OF CONTEXTS AND ACTIVITIES IN WHICH THE RESIDENT IS EXPECTED TO DEMONSTRATE ACHIEVEMENT OF OUTCOME | |
|---|--|
| Pharmacy (Year 1) Residency | Advanced (Year 2) Pharmacy Residency |
| The resident: 1. Provides <i>non-complex</i> drug reviews and presents practice-related content (e.g., practice cases, critical appraisals, therapeutic controversies, formulary reviews). | The resident: 1. Provides <i>complex</i> drug reviews and appropriately critiques practice-related content (e.g., practice cases, critical appraisals, therapeutic controversies, formulary reviews), and teaches other learners in these activities (e.g., Year 1 residents). |
| 2. Responds to <i>common</i> drug information questions that require syntheses of information from multiple sources, providing a response within a time frame that meets the clinicians' needs. | 2. Responds to <i>complex</i> drug information questions that require <i>sophisticated</i> syntheses of information from multiple sources, providing a response within a time frame that meets the clinicians' needs. |
| 3. Provides education and tailors information and education with detail appropriate for the audience. | 3. Provides education to audiences with a broad range of knowledge (i.e., basic to advanced) and tailors information and education with detail appropriate for the audience. |
| 4. Creates appropriate documentation (e.g., handouts) for all medication and practice-related education. | 4. Tailors documentation (e.g., handouts) for all medication and practice-related education to audiences with a broad range of knowledge. |
| 5. Engages in teaching others. | 5. Proactively seeks out and undertakes a variety of opportunities to teach others. |
| 6. Provides meaningful direct instruction, modelling, coaching, and facilitation to <i>junior</i> learners and other healthcare providers. | 6. Provides meaningful direct instruction, modelling, coaching, and facilitation to learners and other healthcare providers. |

| EXPECTED LEVELS OF PERFORMANCE | |
|---|---|
| Expected Level of Performance upon Completion of a Pharmacy (Year 1) Residency | Expected Level of Performance upon Completion of an Advanced (Year 2) Pharmacy Residency |
| The resident, with minimal guidance: | The resident, independently: |
| 1. Gathers adequate information upon initial contact to be able to fully answer the underlying drug information request. | 1. Gathers adequate information upon initial contact to be able to fully answer the underlying drug information request. |
| Consistently produces comprehensive and accurate responses to drug information questions by: Determining the underlying clinical question (or defining the drug therapy problems) and identifying appropriate references to use. Retrieving, analyzing, and synthesizing information in an organized manner with appropriate justification. | 2a. Consistently produces comprehensive and accurate responses to drug information questions by: (i) Determining the underlying clinical question (or defining the drug therapy problems) and identifying appropriate references to use. (ii) Retrieving, analyzing, and synthesizing information in an organized manner with appropriate justification. |
| | 2b. Identifies when follow-up might be required for completed drug information requests. |
| 3. Critically appraises <i>common</i> types of drug-related literature. | 3a. Critically appraises drug-related literature.3b. Recognizes controversial issues and clearly articulates limitations of evidence. |
| 4. Designs and delivers presentations that: (i) Are in line with the learning needs of the audience and include appropriate learning objectives. (ii) Employ an appropriate mode of teaching/content dissemination (e.g., lecture, workshop, small group seminar). (iii) Contain content set at an appropriate level. (iv) Meet the stated learning objectives. | 4a. Designs and delivers presentations that: (i) Are in line with the learning needs of the audience and include appropriate learning objectives. (ii) Employ an appropriate mode of teaching/content dissemination (e.g., lecture, workshop, small group seminar). (iii) Contain content set at an appropriate level. (iv) Meet the stated learning objectives. 4b. Prepares presentations that are enhanced by advanced use of presentation aids/education techniques and are evidence-informed. |

| EXPECTED LEVELS OF PERFORMANCE | |
|--|--|
| Expected Level of Performance upon Completion of a Pharmacy (Year 1) Residency | Expected Level of Performance upon Completion of an Advanced (Year 2) Pharmacy Residency |
| 5. Effectively creates and/or utilizes adjunctive tools and documentation (e.g., slides, audiovisual supports, handouts) in a manner that enhances message delivery and learning. | 5a. Effectively creates and/or utilizes adjunctive tools and documentation (e.g., slides, audiovisual supports, handouts) in a manner that enhances message delivery and learning. 5b. Provides practical supplemental information tailored to the audience as required (e.g., |
| 6. Demonstrates effective verbal and written | handout with supplemental information). 6. Demonstrates effective and advanced verbal |
| communication skills. | and written communication skills. |
| 7. Instructs healthcare learners (e.g., pharmacy, medical, nursing students) on relevant therapeutic topics while on clinical rotations. | 7. Assumes responsibility for educating others at a wide range of learner levels, which may include providing practice education to Year 1 residents. |
| 8. With minimal guidance, provides education at an appropriate level using the appropriate practice-based teaching role (i.e., direct instruction, modelling, coaching, and | 8a. Seeks out or creates opportunities to employ and refine teaching skills in any of the four practice-based teaching roles. |
| facilitation). | 8b. Assumes the most appropriate of the four teaching roles for each situation and adapts the approach as required. |
| 9. For practice-based teaching scenarios, prepares a comprehensive teaching plan, which may include the following: learning objectives, with provision for assessment; an orientation and schedule of learner activities/responsibilities; incorporation of personal learning objectives of the learner; and regular opportunity for feedback. | 9. For practice-based teaching scenarios, prepares a comprehensive teaching plan, which may include the following: learning objectives, with provision for assessment; an orientation and schedule of learner activities/responsibilities; incorporation of personal learning objectives of the learner; and regular opportunity for feedback. |

| PROJECT MANAGEMENT AND RESEARCH | |
|--|---|
| YEAR 1 | YEAR 2 |
| 3.6 Demonstrate Project Management Skills | 3.5 Demonstrate Research Skills |
| The resident shall use effective project management skills to undertake, conduct, and successfully complete a project related to pharmacy. | The resident shall demonstrate the research skills necessary to undertake, conduct, and successfully complete a research project in the defined area of practice. |

| RANGES OF CONTEXTS AND ACTIVITIES IN WHICH THE RESIDENT IS EXPECTED TO DEMONSTRATE ACHIEVEMENT OF OUTCOME | |
|--|--|
| Pharmacy (Year 1) Residency | Advanced (Year 2) Pharmacy Residency |
| The resident: | The resident: |
| For a given/selected practice-based problem or issue, a. Generates a proposal to address it. b. Develops appropriate methods. c. Exhibits effective data gathering. d. Exhibits effective analytical skills. | Constructs a scholarly question for addressing a practice-based research problem and a. Generates a proposal to address the question. b. Selects and defends appropriate methods. c. Exhibits effective data gathering. d. Exhibits effective analytical and interpretation skills. e. Navigates the research ethics board (REB) (or similar oversight board for appropriate reviews) process and requirements. |
| 2. Prepares a written report in a format suitable for dissemination. | 2. Prepares a research project manuscript suitable for publication in a peer-reviewed journal. |
| 3. Is able to defend all elements of the project, from conception through execution to interpretation. | 3. Is able to defend all elements of the project, from conception through execution to interpretation, to a variety of audiences both within and outside the pharmacy profession. |

| EXPECTED LEVELS OF PERFORMANCE | |
|--|---|
| Expected Level of Performance upon | Expected Level of Performance upon |
| Completion of a Pharmacy (Year 1) Residency | Completion of an Advanced (Year 2) |
| | Pharmacy Residency |
| The resident, with some guidance: | The resident, with minimal guidance: |
| 1. Describes a practice-based problem, and defines and executes the approach for its resolution. | 1. Formulates a practice-based research question and defines and executes the approach for answering the question. |
| 2. Establishes and leads work according to project timelines, goals, objectives, and expectations. | 2. Establishes and leads work according to project timelines, goals, objectives, and expectations. |
| 3. Seeks assistance as needed for project management issues. | 3. Resolves project management issues. |
| 4. Manages unanticipated issues to ensure project success. | 4. Manages unanticipated issues to ensure project success. |
| 5. Effectively collaborates with others to initiate, execute, and complete project components. | 5a. Engages other health professionals to collaborate effectively as part of the project team. |
| | 5b. Develops a comprehensive knowledge translation plan (e.g., a plan to incorporate change in local practice as applicable). |
| 6. Is able to defend rationale, methods, results, and conclusions of project in a convincing manner. | 6. Presents and defends project to a variety of audiences. |
| 7. Assembles project results in a scholarly manner suitable for dissemination. | 7. Prepares manuscript for submission to a peer-reviewed journal. |