Educational Outcomes

for

First Professional Degree Programs in Pharmacy

(Entry-to-Practice Pharmacy Programs)

in

Canada

ACKNOWLEDGEMENTS

INTRODUCTION

The following *Educational Outcomes for First Professional Degree Programs in Pharmacy in Canada* was approved by the Association of Faculties of Pharmacy of Canada's (AFPC) Council at the AFPC Annual Meeting in June 2010.

The AFPC Task Force on Educational Outcomes was struck by the Council in late 2008, and completed their work in spring 2010. The result was the development of one set of educational outcomes for all entry-to-practice pharmacy programs in Canada, regardless of the degree offered (Bachelor of Science in Pharmacy or PharmD). The Task Force sought feedback on the draft documents from AFPC Council, The Association of Deans of Pharmacy of Canada (ADPC), all Faculties of Pharmacy across Canada, and pharmacy stakeholders. The final document includes modifications based on the recommendations from these groups.

In designing the educational outcomes for the First Professional Degree Programs in Pharmacy, the Task Force considered a number of issues. These included whether there should be differences between the educational outcomes required of graduates from the baccalaureate and entry-level PharmD (ELPD) programs and consideration given to using similar terminology and format as other professions, such as the CanMeds model. Additionally the Task Force considered the importance of emphasizing the pharmacist's patient care responsibilities in various settings within the educational outcomes, especially in distinguishing between distribution of medications and dispensing of medications, as well as how foundational knowledge should be defined.

The new outcomes are significantly different from previous ones. A summary of the changes include:
- Development of one set of educational outcomes for the First Professional Degree Programs in Pharmacy (previously, AFPC had separate outcomes for baccalaureate and entry-level PharmD programs; there is also a separate educational outcomes for post-baccalaureate PharmD programs in Canada)
- Changing of the existing format and terminology to use format and terminology from the CanMeds model, supplemented by standardized pharmacy-specific terminology from Cipolle et al's "Pharmaceutical Care Practice: The Clinician's Guide" (1).
- Two distinct pharmacist roles with respect to distribution and dispensing functions. Emphasis is placed on the pharmacist's responsibility during dispensing to include provision of patient care. Responsibility for distribution of medications is placed in the management section of the educational outcomes, including the responsibility for managing pharmacy technician functions.

Based on these recommendations, the revised educational outcomes are formatted with the overall goal of graduating **Medication Therapy Experts**. This requires graduates to integrate knowledge, skills and attitudes from seven educational outcomes which have been defined under the roles of: **Care Provider**, **Communicator**, **Collaborator**, **Manager**, **Advocate**, **Scholar**, and **Professional**. Emphasis is placed on the multiple roles of graduates through explicit statements within the appropriate educational outcomes.

Recognizing that the *Educational Outcomes for First Professional Degree Programs in Pharmacy in Canada* is a dynamic document, AFPC has approved a process for review which

includes a 1-year interim, and a 3-year full review. The levels and ranges are currently in draft form and will be added as a support document.

RATIONALE

In reviewing the educational outcomes required of the two FPDPP in Canada, the Task Force considered a number of issues. These are presented to provide understanding of the revisions recommended to the educational outcomes.

1. Establishing one set of educational outcomes for FPDPP

Early in the review process the Task Force explicitly addressed the question as to whether there are, or should be, differences between the educational outcomes required of graduates from the baccalaureate and ELPD programs. The Task Force acknowledged that the specific curriculum and ensuing degree awarded to pharmacy graduates at different universities is primarily a provincial decision that is influenced by many factors. It was also noted that there needs to be a strong alignment between competencies and educational outcomes defined for a profession, and it was recognized that there is only one set of competencies required for Canadian pharmacists at entry-to-practice and one set of Model Standards of Practice (2,3). The Task Force requested guidance from AFPC Council regarding whether they should consider if the university program completed was a baccalaureate or ELPD program and, following discussion, Council determined that one single set of educational outcomes should be defined. Feedback from the ADPC confirmed this for the Task Force. The Task Force, therefore, defined one set of educational outcomes and focused on ensuring that these educational outcomes met society's needs for pharmaceutical care and services, and were clear, current, transparent, evidence-based and supportive of key developments in health professions education in Canada and abroad.

2. Maintaining or changing the existing format and terminology

The Task Force also reviewed the format followed in the 1998 educational outcomes document. It was clarified that this format was based on the then current literature describing the development of competency-based standards of practice (4, 5). In review of this format, it remains consistent with that currently used by pharmacy organizations across Canada as well as with similar work by other professions (6, 7). In particular, the CanMeds model for medicine defines the central role of physicians as medical experts when providing patient care, and six additional, more general ability-based roles that are required to fulfill the central role (6)[*]. This CanMeds format has been widely referenced and is being used by a number of professions (8) and national organizations (9, 10). The Task Force recognized that adoption of a common format and language across the professions would support collaboration and inter-professional care (11). Therefore, the Task Force reviewed the CanMeds model carefully to determine if it would be possible to adopt a similar format and terminology. This review indicated that the primary difference between the CanMeds and AFPC models is that AFPC has placed explicit emphasis on roles of pharmacists beyond individual patient care. This approach acknowledges the pharmacist's responsibility for the provision of drug information, the quality of medication supply, the promotion of population health, etc. Therefore, AFPC does not propose a single, central role of medication therapy expert but instead places emphasis on the multiple roles that graduates fulfill as medication therapy experts. Recognition of roles beyond patient care is consistent with the defining of educational outcomes relative to competencies, and is supported by the recent *Association of Faculties of Medicine* document entitled "The Future of Medical

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[*]   CanMeds focuses on defining competencies, but is clear that these competences are meant to also be used by educators to guide curricular reform.

Education in Canada: *A Collective Vision for MD Education"* (12). The Task Force, therefore, recommends that the AFPC Educational Outcomes use format and terminology from the CanMeds model, supplemented by standardized pharmacy-specific terminology from Cipolle et al's "Pharmaceutical Care Practice: The Clinician's Guide" (13).

Based on these recommendations, the revised educational outcomes are formatted with a goal of graduating **Medication Therapy Experts**, which requires graduates to integrate the seven educational outcomes defined for FPDPP in Canada. Emphasis is placed on the multiple roles of graduates through explicit statements within the appropriate educational outcomes. For example, research, education and drug information are embedded in the scholar educational outcome, and triage is embedded in the care provider educational outcome. The Task Force believes that this format allows the use of a common terminology across the professions while maintaining appropriate emphasis on the multiple roles fulfilled by pharmacy graduates. It is recognized that this format is a departure from previous educational outcomes documents in that there is no separation of professional educational outcomes from the general attributes that underlie fulfillment of the professional roles and which characterize a university graduate. Instead these underlying general attributes are integrated with the roles in the seven educational outcomes.

3. Emphasizing patient care

During the process of aligning the format and terminology of the educational outcomes, the Task Force considered how emphasis could be placed on pharmacist's patient care responsibilities in various practice environments and contexts, including those patient care services that are an integral component of dispensing of medications. The Task Force looked

to existing Canadian documents for reference, including the *Blueprint for Pharmacy (14), the Professional Competencies (2)* and *the Model Standards of Practice (3).* The latter differentiate between **distributing** medications and **dispensing** medications, using Alberta's definition of dispensing which includes a professional responsibility for patient assessment and medication evaluation. This differs from medication distribution, which focuses on ensuring the safety and quality of medications supplied to patients, but does not include the professional aspects of patient assessment or medication evaluation. Using these definitions, the *Model Standards of Practice* then categorizes the patient care responsibilities of pharmacists into two sections: patient care provided as an integral component of dispensing of medications and patient care provided independently from dispensing as part of medication therapy management services. For the former, the standards list the pharmacist's patient care responsibilities that require the patient access, relationship and information that are available uniquely to / with pharmacists during the process of medication distribution. For example, linked to the process of distribution of refills of medications, pharmacists have a unique opportunity and professional responsibility as part of dispensing to assess adherence and to evaluate the effectiveness of chronic disease state management.

The Task force found the argument compelling that dispensing and distribution, while linked, are two distinct roles and that dispensing is not a solely technical function. Use of such a differentiation in these terms allowed emphasis to be placed on the pharmacist's responsibility during dispensing to provide the care required to ensure appropriate, effective, safe and adherent use of medications. The Task force has, therefore, developed educational outcomes stating that patient care is provided in various contexts either as an integral component of dispensing or as part of medication therapy management services that are provided independently from dispensing. The Task Force placed the responsibility for the distribution of

medications in the management educational outcome, with explicit reference to the pharmacist's responsibility for managing pharmacy technicians who are fulfilling the distribution function.

The Task Force recognizes that the emphasis on patient care during dispensing may represent a change for some Faculties. One of the Task Force's goals is to encourage educators to consider integrating the teaching of dispensing with that of providing pharmaceutical care. Via such efforts, it is hoped that new practice models could be developed that are feasible and enable pharmacists to focus on the patient care aspects of dispensing in an economically viable and sustainable manner.

4. Foundational Sciences
The Task Force emphasizes that pharmacy graduates require a strong foundation in the biomedical, pharmaceutical, behavioural, social, and administrative pharmacy sciences in order to achieve the required educational outcomes. A number of stakeholders commented that clear articulation of the foundational knowledge required of graduates would be useful in developing both curricula and assessments, and as supportive evidence of pharmacist's competence to fulfill an expanded scope of practice. The Task Force acknowledges the necessity of defining this foundational knowledge and encourages AFPC to consider the potential need to development more detailed educational outcomes as was completed by the American Association of Colleges of Pharmacy (15) and to review the scientific foundation competencies identified by the American Association of Medical Colleges (16). It is proposed that the latter competencies could be adapted to define the foundational knowledge required of graduates from FPDPP in Canada. Such supporting documents would, in particular, be welcomed by the provincial regulatory authorities for pharmacy.

Medication Therapy Experts

The goal of First Professional Degree Programs in Pharmacy (FPDPP) in Canada is to graduate Medication Therapy Experts. This requires graduates to integrate knowledge, skills and attitudes from all seven educational outcomes. Via this integration, graduates are educated to meet the competencies required of Canadian pharmacists as described by the profession (2). These competencies include roles relating to care and services for individual patients as well as roles emphasizing the responsibilities of pharmacists to populations of patients, to their communities and to the profession itself. In addition, graduates who are **Medication Therapy Experts** are educated to fulfill roles beyond those required of pharmacists, acknowledging that the goal of university education extends beyond solely preparing graduates to enter into pharmacy practice.

Educational Outcomes[†]

Care Provider: Pharmacy graduates use their knowledge, skills and professional judgement to provide pharmaceutical care and to facilitate management of patient's medication and overall health needs.

Communicator: Pharmacy graduates communicate with diverse audiences, using a variety of strategies that take into account the situation, intended outcomes of the communication and the target audience.

Collaborator: Pharmacy graduates work collaboratively with teams to provide effective, quality health care and to fulfill their professional obligations to the community and society at large.

Manager: Pharmacy graduates use management skills in their daily practice to optimize the care of patients, to ensure the safe and effective distribution of medications, and to make efficient use of health resources.

Advocate: Pharmacy graduates use their expertise and influence to advance the health and well-being of individual patients[‡], communities, and populations, and to support pharmacist's professional roles.

Scholar: Pharmacy graduates have and can apply the core knowledge and skills required to be a medication therapy expert, and are able to master, generate, interpret and disseminate pharmaceutical and pharmacy practice knowledge.

Professional: Pharmacy graduates honour their roles as self-regulated professionals through both individual patient care and fulfillment of their professional obligations to the profession, the community and society at large.

[†]   The educational outcomes are presented in an order that matches that utilized by CanMeds.

[‡]   See glossary for definition of patients.

Educational Outcomes

Care Provider

As *Care Providers* pharmacy graduates use their knowledge, skills and professional judgement to provide pharmaceutical care and to facilitate management of patient's medication and overall health needs.

Graduates from FPDPP in Canada fulfill this educational outcome in all sites where licensed pharmacists provide patient care either as an integral component of the dispensing of medications, or as a professional service provided independently from the dispensing of medications.

This means that graduates:

i. **possess** the core knowledge, skills and attitudes required of pharmacists to:
   - manage the medication therapy of patients who require the pharmacist's participation in their care;
   - manage the medication therapy of patients who are willing and able to accept the responsibilities required by this care;
   - manage the medication therapy of patients with common medication-therapy problems and patients who require urgent care[§];
   - provide basic first aid and CPR;
   - administer injections in accordance with laws and regulations;
   - provide care in accordance with accepted frameworks that expand the pharmacist's scope of practice (e.g. medical directives);
   - recommend appropriate sources of support[**] for patients experiencing common difficulties in daily living[††];
   - advise patients on common, current health promotion programs, and;

ii. **are able to acquire** the knowledge and skills required to manage patients with uncommon or highly complex medication-related needs, or;

iii. are able to appropriately refer patients for the management of medication therapy needs that fall beyond their individual scope of practice, and:

iv. are able to appropriately triage patients to other primary care providers for needs that fall outside the scope of practice of pharmacists.

[§] Urgent medication therapy needs are those that require urgent care by the pharmacist or urgent referral to primary care providers (e.g. via ambulance or referral to ER).

[**] Graduates are **not** expected to possess knowledge of specific community resources: they must only know that such services / resources may exist and be able to direct the patient regarding who to contact.

[††] Difficulties with, for example, transportation, activities of daily living, emotional, spiritual needs.

As **Care Providers**, pharmacy graduates: **(13)**

A. Assess patients

1.1 Develop and maintain professional, collaborative relationships required for patient care.
- 1.1.1   establish and maintain a professional, caring practice environment;
- 1.1.2   demonstrate that the patient's goals are the priority;
- 1.1.3   determine when it is ethically and professionally appropriate to involve caregivers;
- 1.1.4   acknowledge and respect the roles and responsibilities of the pharmacist, the patient and/or caregivers, and the patient's other health care professionals (9).

1.2 Elicit and complete an assessment of required information to determine the patient's medication-related and other relevant health needs.
- 1.2.1   elicit the reason(s) for the patient's visit to the pharmacy or encounter with the pharmacist;
- 1.2.2   obtain and evaluate relevant history from the patient, his/her chart, caregivers and other health care professionals;
- 1.2.3   order, retrieve and assess relevant lab tests and diagnostic assessments;
- 1.2.4   perform and interpret findings of relevant physical assessments that are required to determine appropriate medication therapy, and;
- 1.2.5   complete an assessment of the patient's ability to take / use / administer his/her medications.

1.3 Assess if a patient's medication-related needs are being met.
- 1.3.1   evaluate the safety and effectiveness of a patient's medications with consideration of the patient's values and preferences, characteristics, conditions, functional capabilities, other medications and access to health care / monitoring;
- 1.3.2   determine whether a patient is appropriately managing his/her therapy, including appropriate administration and adherence in particular for chronic disease management;
- 1.3.3   determine whether a patient's medications are achieving the desired goals including consideration of efficacy and adverse effects;
- 1.3.4   determine whether a patient requires medication assessment and reconciliation;
- 1.3.5   where appropriate, identify a patient's medication-related needs as specific medication-therapy problems, and:
- 1.3.6   determine if a patient requires additional care or services consistent with established collaborative practice agreements (see glossary).

1.4 Determine if a patient has relevant, priority health and wellness needs.
- 1.4.1   recognize signs, symptoms and risk factors that relate to medical or health problems that fall into the scope of practice of other health care professionals.[‡‡];
- 1.4.2   recognize signs and symptoms associated with medical emergencies;
- 1.4.3   recognize problems with activities of daily living important to the patient's well-being, and:
- 1.4.4   identify opportunities for advocacy, health promotion and disease prevention with individuals to whom they provide care.

B. Plan Care

1.5 Refer patients for management of priority health and wellness needs that fall beyond the scope of practice of pharmacists

1.6 Develop a care plan that addresses a patient's medication-therapy problems and priority health and wellness needs.
- 1.6.1   prioritize a patient's medication-related needs;
- 1.6.2   establish goals of medication therapy with the patient (desired endpoints, target values and timeframes for medication therapies);

[‡‡]   Including, for example, signs and symptoms of diabetes mellitus, hypertension, arthritis, stroke, cardiac disease.

1.6.3   assess alternative strategies and negotiate the therapeutic option best suited to the patient;
1.6.4   integrate the recommended therapeutic options for a patient's medication-related needs into a co-ordinated plan;
1.6.5   determine monitoring parameters for desired therapeutic endpoints and potential adverse effect, specifying target values and start, frequency and end time-points for monitoring;
1.6.6   decide specific actions to be taken by the pharmacist as necessary for management of medication-related needs, specifically determining whether it is appropriate to:
•   dispense a medication according to a new prescription;
•   dispense an authorized refill of a medication;
•   authorize an extension of refills of a medication;
•   modify a patient's medications;
•   recommend changes in medications;
•   prescribe medications or therapies;
•   administer a medication, and/or;
•   refer the patient to other health care professionals for assessment and management;
1.6.7   determine if a patient requires information or other support to facilitate his/her management of needs related to activities of daily living, health promotion or well-being, and:
1.6.8   negotiate the responsibilities of the pharmacist and patient, and when other health care professionals should be contacted.

1.7   Implement the care plan.
1.7.1   undertake specific actions as specified in the care plan (e.g. prescribing, ordering lab tests);
1.7.2   educate the patient regarding the care plan to facilitate understanding and adherence;
1.7.3   facilitate continuity of care through referral and communication with relevant care providers;
1.7.4   convey information on maintaining and promoting health;
1.7.5   convey information about available social support services to assist with daily living, and;
1.7.6   schedule required follow-up in accordance with a patient care plan.

C.   Follow-up and Evaluate

1.8   Elicit clinical and / or lab evidence of patient outcomes.
1.8.1   determine the clinical status of the patient, including completing physical assessments required for monitoring of medication therapy;
1.8.2   evaluate the efficacy of the care plan relative to the desired goals;
1.8.3   evaluate the safety of the care plan including the presence of adverse drug reactions or effects;
1.8.4   identify any medication errors or close calls (see glossary)(9), and:
1.8.5   determine changes in pharmacotherapy that are required.

1.9   Assess and manage patients' new medication-related needs[§§].

D. Document

1.10 Support the continuity of patient care by documenting their patient care activities
    1.10.1 document in a timely, retrievable, usable manner
    1.10.2 fulfill professional responsibilities for documentation
    1.10.3 report and document the reporting of adverse events and close calls (9).

Communicator

As *Communicators* pharmacy graduates communicate with diverse audiences, using a variety of strategies that take into account the situation, intended outcomes of the communication and the target audience.

Graduates from FPDPP in Canada communicate effectively with patients to whom they are providing care, including those presenting communication challenges, and with peers and other health care professionals in both individual and group settings.

As **Communicators**, pharmacy graduates:

2.1. Communicate non-verbally and verbally with others.
- 2.1.1. use active listening skills and respond appropriately;
- 2.1.2. exhibit empathy, tact and respect in their dealings with others;
- 2.1.3. demonstrate sensitivity, respect and empathy in intercultural and inter-professional situations;
- 2.1.4. when speaking, use organized processes and appropriate, precise expressions and vocabulary;
- 2.1.5. tailor the content of their communication to specific contexts and audiences, and:
- 2.1.6 adapt their communication techniques to facilitate efficient and effective clinical encounters.

2.2. Communicate in writing.
- 2.2.1. write clearly, using organized processes and appropriate vocabulary;
- 2.2.2. correctly apply the rules of syntax, grammar and punctuation, and:
- 2.2.3. adapt the content of their arguments to specific contexts and target audiences.

2.3. Present information.
- 2.3.1. appear comfortable, engage the audience, use appropriate tone and pace, and use nonverbal language appropriately;
- 2.3.2. are organized and can set and adhere to appropriate time limits, and:
- 2.3.3 respond to and manage interaction with the audience.

2.4. Use communication technology.
- 2.4.1. demonstrate sufficient understanding of information systems to integrate computer and related technology into effective communication, and;
- 2.4.2. use effective communication skills regardless of the media employed, including effective use of visual and educational aids.

Collaborator

As ***Collaborators*** pharmacy graduates work collaboratively with teams to provide effective, quality health care and to fulfill their professional obligations to the community and society at large.

Graduates from FPDPP in Canada collaborate effectively with:
- the patient and the full range of health care professionals on the patient care team;
- co-workers, and:
- professional groups / associations.

As **Collaborators**, pharmacy graduates (9, 11):

3.1. Function as members of teams.
3.1.1	accept leadership roles where appropriate;
3.1.2	actively make their expertise available to others and willingly agree to share relevant information, using language that can be understood by all;
3.1.3	clarify roles, responsibilities and expertise of team members, identifying overlaps and gaps;
3.1.4	recognize and respect the roles, responsibilities and competence of other professionals;
3.1.5	make their points of view known, listen to and respect the opinions of others, defend points of view if necessary;
3.1.6	contribute to planning, organizing and performing of work to be done, and integrating evidence while evaluating the results;
3.1.7	respect the rules established by the group;
3.1.8	help maintain a healthy work environment and assist with conflict management, and:
3.1.9	support continued efforts of the group by providing positive feedback, including evidence of progress and impact.

3.2 Support team-based care in a community setting with geographically distinct centres of care.
3.2.1	develop and maintain collaborative relationships with a network of local health care professionals and care providers;
3.2.2	clarify pharmacist's roles and responsibilities that are acceptable / appropriate;
3.2.3	fulfill commitments for provision and follow-up of care;
3.2.4	adapt their roles in teams and networks of care to the circumstances and requirements, and;
3.2.5	participate in local health initiatives as requested and appropriate.

3.3 Work collaboratively with the patient and his/her health care professionals to provide care and services that facilitate management of the patient's health needs.
3.3.1	negotiate the care and services that the pharmacist and other members of the health care team will provide as consistent with laws / regulations relevant to collaborative care;
3.3.2	ensure attainment and maintenance of training / certification / credentials required to provide collaborative care or to fulfill medical directives / delegation;
3.3.3	ensure legality of collaborative practice agreements / medical directives / delegation agreements;
3.3.4	plan the provision of care in a coordinated fashion;
3.3.5	provide agreed upon care and services;
3.3.6	document the provision of care and services, and:
3.3.7	communicate and review the care / services provided and patient status / outcome.

Manager

As *Managers* pharmacy graduates use management skills in their daily practice to optimize the care of patients, to ensure the safe and effective distribution of medications, and to make efficient use of health resources.

Graduates from FPDPP in Canada manage their individual practice and staff for whom they are directly responsible to ensure that their patients are provided the care, services and medications required to meet their medication therapy needs. They support sustainable practices that address patient needs and changing professional roles[***].

As **Managers**, pharmacy graduates:

4.1 Manage their personal practice.
- 4.1.1 set priorities and manage their time to balance patient care, workflow and practice requirements, and;
- 4.1.2 adapt their practice to fulfill evolving professional roles.

4.2 Manage the safe and efficient distribution of medications.
- 4.2.1 utilize inventory control concepts to maintain an inventory control system;
- 4.2.2 manage the distribution[†††] of medication in a variety of settings,
- 4.2.3 evaluate the factors critical to safe and efficient medication distribution systems including pharmacy layout / design, workflow, technology and automation (9) and;
- 4.2.4 anticipate, recognize and manage human, environmental and medication distribution situations that place patients at risk (9).

4.3 Participate in quality assurance and improvement programs.
- 4.3.1 evaluate the quality of care and cost effectiveness of services they provide;
- 4.3.2 disclose, manage and report adverse drug events (9);
- 4.3.3 disclose, manage and report errors, incidents and unsafe practices (9);
- 4.3.4 participate in formal planning for practice change and implementation of services to meet patient's needs and/or improve the quality of care provided, and:
- 4.3.5 adapt to change, providing new or emerging services as consistent with management's practice change plans.

4.4 Manage the staff under their direct supervision.
- 4.4.1 supervise members of the pharmacy team, including pharmacy technicians, to ensure competent performance of functions;
- 4.4.2 ensure that pharmacy technicians and staff are delegated and undertake functions appropriate to their training and legislation;
- 4.4.3 manage workload to prioritize provision of professional services;
- 4.4.4 function as a role model for professional and support staff, and:
- 4.4.5 participate in staff selection, training, development and evaluation.

4.5 Manage to maintain the sustainability of the practice.
- 4.5.1 understand the impact of funding and payment policies on the provision of professional services;
- 4.5.2 create a business plan for the provision of professional services;

[***] For clarity, it is emphasized that the graduates are **not** expected to be able to be managers of a pharmacy upon completion of the FPDPP.

[†††] See glossary

4.5.3   participate in strategic planning for their practice site;
4.5.4   understand marketing principles in the context of supply and demand for professional services, and;
4.5.5   incorporate the use of technology.

Advocate
As *Advocates* pharmacy graduates use their expertise and influence to advance the health and well-being of individual patients, communities, and populations, and to support pharmacist's professional roles.

Graduates from FPDPP in Canada advocate on behalf of individual patients, local patient groups and the profession of pharmacy, at an individual, organizational / institutional, and government level.

As **Advocates**, pharmacy graduates:

5.1 Interpret the advocacy role of pharmacists / profession of pharmacy.
  5.1.1   describe the ethical and professional issues inherent in health advocacy, including altruism, social justice, autonomy, integrity and idealism;
  5.1.2   explain the role of the profession in advocating collectively for health and patient safety, and:
  5.1.3   describe how policy and procedures impact on the health of the populations served.

5.2 Promote the health of individual patients, communities, and populations
  5.2.1   facilitate patient's interaction with the health care system through advice, education and/or guidance;
  5.2.2   support patient's access to required health services by representing or speaking on behalf of patients ;
  5.2.3   represent patient's interests through participation in policy and procedure development within health systems;
  5.2.4   participate in health promotion activities, public health campaigns and patient safety initiatives that are directed at disease prevention, risk factor reduction and/or harm minimization[‡‡‡];
  5.2.5   undertake relevant public health screening processes for early disease detection, and;
  5.2.6   plan and implement public health promotion education and awareness raising campaigns with other health professionals.

5.3 Support the role of pharmacists in evolving health care systems.
  5.3.1   promote the impact of the pharmacist on patient outcomes;
  5.3.2   promote the role of pharmacists in the development and implementation of health procedures and policies, and:
  5.3.3   accept a leadership role to support the vision for advancement of the profession of pharmacy.

[‡‡‡]   Adapted, with permission, from the draft Primary Health Care Pharmacist Competencies, ADAPTS (Access to quality Drug therapy- Applying Pharmacists' knowledge to The primary care System, personal communications Natalie Kennnie, March 2010.

Scholar

As *Scholars* pharmacy graduates have and can apply the core knowledge and skills required to be a medication therapy expert, and are able to master, generate, interpret and disseminate pharmaceutical and pharmacy practice knowledge.

Graduates from FPDPP in Canada use their knowledge and skills:
- for clinical reasoning and decision-making required during daily pharmacy practice;
- to provide drug information and recommendations to inform practices and health policy at an individual and organizational / institutional level;
- to educate the following regarding medications and appropriate medication use, including the pharmacist's role:
  - individual and groups of patients, peers, pharmacy and allied health care professional students, interns and residents, allied other health care professionals;
  - individual medical specialists and;
- to initiate or collaborate on projects related to problems identified during daily pharmacy practice including projects related to drug utilization and continuous quality improvement.

As **Scholars**, pharmacy graduates:

6.1 Demonstrate a thorough understanding of the fundamental knowledge required of pharmacists and apply this knowledge in daily practice.
- 6.1.1 rationalize their recommendations and decisions with appropriate, accurate explanations and best evidence;
- 6.1.2 rely on professional experience to develop solutions to routine, previously encountered problems;
- 6.1.3 utilize established decision-making frameworks when faced with new situations to identify, analyze and develop solutions to problems, and:
- 6.1.4 undertake and apply learning required to manage new problems.

6.2 Provide drug information and recommendations.
- 6.2.1 identify needs for information, recommendations and decisions on medications;
- 6.2.2 conduct a systematic search for evidence using a variety of search methods and tools;
- 6.2.3 critically analyze information including primary research articles;
- 6.2.4 determine plausible solutions and select the most appropriate recommendation;
- 6.2.5 communicate information / recommendations;
- 6.2.6 evaluate the usefulness of the information provided, and:
- 6.2.7 document the information provided.

6.3 Educate regarding medications and appropriate medication use, including the pharmacist's role.
- 6.3.1 identify learning needs of the audience;
- 6.3.2 select educational techniques appropriate for the learners;
- 6.3.3 select and organize content;
- 6.3.4 implement their educational plans, and:
- 6.3.5 assess the outcomes of their education.

6.4 Apply principles of scientific inquiry and critical thinking while participating in practice-based research.

    6.4.1   understand the need for the generation and discovery of new information as it pertains to the continuous development of the profession, innovations in practice and optimization of pharmacotherapy;

    6.4.2   recognize relevant practice or medication use problems;

    6.4.3   define the parameters of relevant problems;

    6.4.4   retrieve and assess reports/literature relevant to identified problems;

    6.4.5   formulate research questions/hypotheses;

    6.4.6   design practice-based research projects to address research questions, and:

    6.4.7   contribute to the development of new knowledge by participating in practice-based research projects.

Professional (17, 18)

As **Professionals** pharmacy graduates honour their roles as self-regulated professionals through both individual patient care and fulfillment of their professional obligations to the profession, the community and society at large.

Graduates from FPDPP in Canada conduct themselves professionally in all situations where they are reasonably perceived to be a representative of the profession of pharmacy.

As **Professionals**, pharmacy graduates:

7.1 Demonstrate professionalism throughout patient encounters.
- 7.1.1 show respect for patients by acknowledging the patient as a person, listening actively and considering their needs and expectations;
- 7.1.2 accept responsibility for recognizing and meeting patients' medication therapy needs;
- 7.1.3 maintain patient confidentiality, and:
- 7.1.4 maintain appropriate boundaries with patients.

7.2 Practice in an ethical manner which assures primary accountability to the patient.
- 7.2.1 involve the patient in decision-making, respecting their right to make their own choices;
- 7.2.2 fulfill requirements for obtaining patient consent;
- 7.2.3 integrate patient preferences related to culture, beliefs and practices;
- 7.2.4 use ethical frameworks as one component of professional judgement;
- 7.2.5 prioritize patient needs, accepting inconvenience and subordinating their personal interests to those of their patients;
- 7.2.6 ensure the continuity of patient care, abiding by the principle of nonabandonment, and:
- 7.2.7 recognize and manage situations presenting ethical dilemmas including conflicts of interest.

7.3 Maintain their competence to practice through life long learning.
- 7.3.1 adhere to regulatory requirements for maintenance of competence as consistent with the self-regulating status of a health professional;
- 7.3.2 evaluate their practice to identify areas for continuing professional development;
- 7.3.3 acknowledge and reflect on errors, omissions and close calls to identify limitations in competence / performance;
- 7.3.4 seek and accept feedback to identify limitations or strengths in competence / performance;
- 7.3.5 recognize their limits of competence and seek assistance;
- 7.3.6 plan and undertake learning activities to support maintenance of competence and professional development;
- 7.3.7 incorporate learning into their practice;
- 7.3.8 assess the impact of learning on competence and practice performance, and:
- 7.3.9 document their maintenance of competence.

7.4 Practice in manner demonstrating professional accountability.
- 7.4.1 comply with the legal and regulatory requirements of practice;
- 7.4.2 respect and fulfill professional standards of practice;
- 7.4.3 be accessible to patients and other health care professionals;
- 7.4.4 fulfill their professional tasks and commitments to patients in a diligent, timely, reliable, respectful manner;
- 7.4.5 accept responsibility for their decisions and recommendations with patients and colleagues;
- 7.4.6 use health care resources appropriately, including human and financial resources;
- 7.4.7 maintain a professional image, using appropriate language and demeanour;
- 7.4.8 maintain their professional composure even in difficult situations, and:
- 7.4.9 maintain appropriate professional boundaries.

7.5 Display a sense of pride in and commitment to the profession and its evolving role in the health care system.
- 7.5.1 participate in peer review and quality assurance processes;
- 7.5.2 participate in education of future pharmacists by making practice-based learning opportunities available as a mentor / preceptor;
- 7.5.3 adapt their practice to provide all professional services required according to pharmacist's scope of practice;
- 7.5.4 support the professional organizations in their efforts to advance the professional role of pharmacists, and:
- 7.5.5 contribute to the planning for implementation of change including strategies to identify and overcome barriers, and to capitalize on facilitators.

Glossary

Close call (9)
An event with the potential for harm that did not result in harm because it did not reach the patient due to timely intervention or good fortune (sometimes called a near miss). The term "good catch" is a common colloquialism to indicate the just-in-time detection of a potential adverse event.

Collaborative Agreements
Collaborative practice agreements will include, for the purpose of this document, medical directives, delegation agreements and other forms of formal agreements defining expanded pharmacists' care and services.

Dispensing
Dispensing means the safe and effective provision of medications to patients, and incorporates the professional responsibilities of evaluating patients and their medications, and technical responsibilities for the safe distribution of medications.

Distribution
Distribution means, with respect to a medication, the safe transfer of a medication from the manufacturer to the patient in a manner that preserves both the integrity of the medication and the safety of the patient (19). Distribution does **not** include the professional aspect of evaluation of a patient or medication therapy. It does includes aspects such as interpretation of medication prescriptions; performance of pharmaceutical calculations; selection of ingredients; storage and handling conditions; management of stability issues, and: acquisition and disposal of pharmaceuticals).

First Professional Degree Program in Pharmacy (20)
Based on the work of the Canadian Council for Accreditation of Pharmacy Programs, first professional degree programs in pharmacy are programs that do not require entering students to have a prior degree in pharmacy. These programs are often referred to as entry-level, or entry-to-practice programs.

Medication Therapies
Includes non-prescription medications, natural health products, and devices and supports for use with medications.

Medication Therapy Management Services (21)
Medication Therapy Management is a distinct service or group of services that optimize therapeutic outcomes for individual patients. Medication Therapy Management Services are independent of, but can occur in conjunction with, the provision of a medication product. Medication Therapy Management encompasses a broad range of professional activities and responsibilities within the licensed pharmacist's, or other qualified health care professional's, scope of practice. These services include, but are not limited to, the following, according to the individual needs of the patient:
1. Performing or obtaining necessary assessments of the patient's health status;
2. Formulating a medication treatment plan;
3. Selecting, initiating, modifying, or administering medication therapy;
4. Monitoring and evaluating the patient's response to therapy, including safety and effectiveness;

5. Performing a comprehensive medication review to identify, resolve, and prevent medication-related problems, including adverse drug events;
6. Documenting the care delivered and communicating essential information to the patient's other primary care providers;
7. Providing verbal education and training designed to enhance patient understanding and appropriate use of his/her medications;
8. Providing information, support services and resources designed to enhance patient adherence with his/her therapeutic regimens;
9. Coordinating and integrating medication therapy management services within the broader health care-management services being provided to the patient.

Patients

Includes patients, their families and caregivers.

Primary Care

Primary Health Care has been defined as the first level of contact with the health system to promote health, prevent illness, care for common illnesses, and manage ongoing health problems (22).

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