

Citation:

Mulherin K, Ijaz N, Prata A, Cheng W. Canadian Experiential Education Project for Pharmacy. Priority #3: Best practice in preceptor development to establish/augment best qualities/abilities in preceptors. Part 1 of a 4-Part Series: Part 1: The current state of pharmacy preceptor development programs across Canada. Windpharm Consulting for the Association of Faculties of Pharmacy (AFPC) 2015.

Acknowledgements:

This report is possible only through the dedication and contribution of:

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Executive Summary

Introduction: This is the first instalment of four addressing a single priority: Priority 3: **Best practice in preceptor development to establish/ augment best qualities/abilities in preceptors** within the Canadian Experiential Education (CanExEd) Project for Pharmacy. The objective of this report is to provide a synopsis of the current state of preceptor development programs (PDP) within the Canadian Pharmacy setting.

Methods: Semi-structured interviews with key informants and a broad cross-section of grey literature (textual and electronic multimedia sources) pertaining to PDPs were collected. Transcript excerpts were 'deductively' analysed to collect specific information provided by informants about the preceptor training practices implemented at their respective universities. In several cases, informants provided information about textual or multimedia content pertaining to preceptor education. This was subsequently gathered as 'grey literature'. Second, informants' comments were 'inductively' analysed to identify a range of broader issues or concerns pertaining to pharmacy preceptor education in Canada. Data from interviews and textual/multimedia sources were subsequently collated and corroborated.

Results: Sixteen interviews were conducted between July and January 2015. Interviews were predominantly one-on-one. The majority of grey literature was electronic and found online at the schools' respective websites.

Key informants interviewed for this project consistently conferred importance to the overarching 'aims' of university-based preceptor training, in addition to specific educational 'goals' (learner outcomes) and 'objectives' (content). More specifically, they tended to discuss preceptors' dual role in a.) not only guiding students to be skilled in the technical aspects of pharmacy practice, but also in b.) supporting students non-judgmentally to mature as aspiring pharmacists in an emotionally safe learning environment. However, such philosophical pedagogic 'aims' do not generally appear in Canadian pharmacy schools' online preceptor training modules, perhaps reflecting a preoccupation with educational content. Five primary subject areas comprise content across most Canadian pharmacy schools:

1. Parameters of the preceptor role
2. The range of possible learning styles students may exhibit
3. Setting expectations and providing constructive feedback and formal assessment to students
4. Supporting students in succeeding in their placements
5. Managing conflict and challenging situations

In addition, most schools orient preceptors to the policies and procedures that govern experiential education at their faculties, such as those pertaining to formal assessment, attendance and absenteeism whether through written guides, or live and online presentations. In recent years, the majority of Canadian pharmacy schools (including the Universities of Alberta, British Columbia, Dalhousie, Laval, Montreal and Western) have transitioned to developing preceptor training in an online/distance education format. Interviewees provided insight into the relative advantages and disadvantages of online versus live preceptor trainings. Diverse approaches to the development of their respective preceptor training strategies exist in the various Canadian ExEd programs.

Discussion: Canadian pharmacy schools are moving toward requiring preceptors to undertake online-based training programs prior to supervising students. Several multimedia training programs have been developed across the country to this end that cover a range of topic areas. Content seems to be relatively harmonized across schools. Interviewees uniformly expressed an interest in consolidating existing resources towards a national PDP and are aware that a considerable base of educational content has been developed across the country and internationally, which may preclude the need for future additional curriculum development for training preceptors. More pressing was the production of a program that surmounted certain logistical (access, administration, tracking) and pedagogical (different media and modes of education) issues.

Conclusion: PDP in Canada use multiple modes and media to deliver a consistent content for novice preceptor training. Some jurisdictions insist on preceptor training and others consider it optional. The predominant media is online and mode is independent learning and although convenient, precludes the benefit of learning in a social environment and makes deeper learning unlikely. There is an appetite for a national PDP that builds on the existing body of educationally-related CPD.

Priority 3: Best practice in preceptor development to establish/ augment best qualities/abilities in preceptors

INTRODUCTION

This is the first instalment of four addressing a single priority: Priority 3: **Best practice in preceptor development to establish/ augment best qualities/abilities in preceptors** within the Canadian Experiential Education (CanExEd) Project for Pharmacy. The CanExEd project commenced in the fall of 2014 and concludes in mid-2016. It is conducted under the auspices of the Association of Faculties of Pharmacy of Canada (AFPC). The project goal is to bring a national approach to experiential education (ExEd) in Canada. To date, the 10 Canadian Pharmacy ExEd programs have developed, implemented and evaluated their respective ExEd programs autonomously with ad hoc, informal sharing of components between Faculties. The Project is expected to promote discovery and adoption of best practices consistently across the country.

The CanExEd Project is a quality improvement initiative that uses systematic literature review and borrows methodology from the qualitative research realm. Findings from literature review are examined alongside those of stakeholders (experiential education faculty, learners, preceptors and site educational/clinical administrators) to identify gaps between present practice and best practice. Prototypes are subsequently developed as a means of nationally advancing Canadian Pharmacy ExEd to a higher standard. CanExEd reports for all 8 priorities are available at: <http://afpc.info/content/canexed-reports>.

A set of 4 reports were/will be (Part 4 held as of July 2015) authored in order to address this particular priority:

Part 1: The current state of pharmacy preceptor development programs across Canada.

Part 2: What evidence and theory should influence the design and implementation of a national preceptor development program?

Part 3: Describe approaches for operationalization of best practice (according to evidence and theory) for a preceptor development program on a national scale.

Part 4: Select indicators (immediate vs. long-term, preceptor, organizational, student sources) that will show this new approach to be successful.

Preceptor development is a mandatory accreditation standard in Canada. Criterion 29.3 of the Canadian Council for Accreditation of Pharmacy Programs (CCAPP) states, *“The Faculty must have established criteria and training for preceptors and preceptors must be committed to supporting the teaching process.”* During accreditation, CCAAPP reviews the program’s evidence of a preceptor orientation and education program for both novice and experienced preceptors. In addition, Criterion 29.5 provides guidance on the responsibilities and therefore the training of these clinical instructors, *“The model of supervision at each stage of the practice experience curriculum must ensure adequate oversight, coordination, guidance, instruction, and assessment of each student.”* (1)

The Accreditation Council for Pharmacy Education (ACPE) Accreditation Standards similarly insist, in standard 20, *“The college or school has a sufficient number of preceptors (practice faculty or external practitioners) to effectively deliver and evaluate students in the experiential component of the curriculum. Preceptors have professional credentials and expertise commensurate with their responsibilities to the professional program”* and further stipulate that:

- **20.1. Preceptor criteria** – The college or school makes available and applies quality criteria for preceptor recruitment, orientation, performance, and evaluation. The majority of preceptors for any given student are U.S. licensed pharmacists.
- **20.3. Preceptor education and development** – Preceptors are oriented to the program’s mission, the specific learning expectations for the experience outlined in the syllabus, and effective performance evaluation techniques before accepting students. The college or school fosters the professional development of its preceptors commensurate with their educational responsibilities to the program. (2)

Preceptor development programs are and will be for the foreseeable future necessary to orchestrate a considered, organised and effective means to ensure well-prepared preceptors are teaching pharmacy students. The objective of this report is to provide a synopsis of the current state of preceptor development programs (PDP) within the Canadian Pharmacy setting.

METHODS

The aim of data collection was to gather information about the current state of preceptor training/development/education nationwide in order to assess commonalities and differences across universities and to unfold a vision of future directions for enhancing such offerings (See the 3rd report in the series for future directions). As a quality improvement initiative, the CanExEd project employs methodologies commonly used in qualitative research. In the current work, semi-structured interviews with key informants and a broad cross-section of grey literature (textual and electronic multimedia sources) pertaining to PDPs were collected.

An Interview protocol was developed to explore research questions related to Priority #3. The interview used semi-structured interview questions to guide discussion. [Appendix A](#) provides the complete interview guide. Interviews were iterative and emergent. Interviews with key informants were conducted at the interviewee's convenience using audio and/or video capture technology. Informants were identified through AFPC's PEP-C group and the CanExEd steering committee.

Interviewees consented to being recorded by signing, "Informed Consent for Interview Recording". [Appendix B](#) contains content of the consent form. Interviews were transcribed verbatim, and those segments pertaining to preceptor education were systematically analysed in two key ways. First, transcript excerpts were 'deductively' analysed to collect specific information provided by informants about the preceptor training practices implemented at their respective universities. In several cases, informants provided information about textual or multimedia content pertaining to preceptor education that was subsequently gathered as 'grey literature'. Second, informants' comments were 'inductively' analysed to identify a range of broader issues or concerns pertaining to pharmacy preceptor education in Canada.

Textual and multimedia sources were analysed with the aim of describing the range of preceptor education training programs offered across Canada, the length of such trainings and whether they were considered mandatory for all new preceptors the overarching aims driving such trainings and the specific content included therein.

Data from interviews and textual/multimedia sources were subsequently collated and corroborated. Key informants were furthermore offered an opportunity to review the findings for accuracy and omissions.

RESULTS

Quantitative

Semi-structured interviews

Sixteen interviews were conducted between July and January 2015. Interviews were predominantly one-on-one with two exceptions where the interviewer interviewed 2 participants simultaneously.

- 13/16 interviews were with Canadian Academics (Dean =1, Experiential Educators =11, assessment expert =1) within Pharmacy Faculties. All Faculties were included with the exception of two.
- 1/16 was with a US ExEd expert (Texas Tech)
- 1/16 was a member of NAPRA
- 1/16 was with a learner

Interview duration ranged from 45 to 180 minutes. Long interviews were completed over 2-3 sessions. All interviews were conducted by the Project Manager and captured via audio and when possible, video.

Interviewees were very forthcoming in their conversations regarding ExEd and were keen to participate. None expressed concern or questions regarding informed consent for recording.

Grey Literature

The majority of these sources were electronic, and found online at the schools' respective websites. Materials used to develop and deliver live content were not readily available to the researchers due to their very nature of not being available electronically.

Qualitative

Aims of Preceptor Development

One area where interview findings differed somewhat from our grey literature search pertained to the question of preceptor educational aims, that is, the question of the underlying principles behind preceptor training programs. Across the pedagogical literature, scholars commonly differentiate between educational aims, goals and objectives (3). Aims-

based education is a fundamentally 'value-laden' (p. 8) enterprise. Although not directly measurable, aims are meant to focus on the underlying principles underlying an educational project, and to this 'direct the construction of goals and objectives' (p. 9). Goals connect aims (values) with objectives (content or learner outcomes) in a manner that is adequately specific to drive curriculum development while remaining sufficiently broad to reflect the underlying principles meant to underpin this process. They focus on the skills and qualities that learners are hoped to demonstrate after completing the training being formulated. Learning objectives are much more specific, referring directly to the educational content which will be engaged in the learning process.

Key informants interviewed for this project consistently conferred importance to the overarching 'aims' of university-based preceptor training, in addition to specific educational 'goals' (learner outcomes) and 'objectives' (content). More specifically, they tended to discuss preceptors' dual role in a.) not only guiding students to be skilled in the technical aspects of pharmacy practice, but also in b.) supporting students non-judgmentally to mature as aspiring pharmacists in an emotionally safe learning environment. While philosophic pedagogic 'aims' do not generally appear in Canadian pharmacy schools' online preceptor training modules, there are 2 notable instances where programs do make an effort to provide high-level aims. Dalhousie's interprofessional preceptor development program modules that states, "This course aims to augment practice learning experiences for both student and preceptor." And U of A has (in draft form) identified "Qualities of an Effective Preceptor" which was adapted from a PEP-C statement in 2007:

- Possess a commitment to teaching
- Engage in learning with the student
- Model building good rapport and collaborative relationships with patient and health care team
- Create professional relationships with students
- Flexible and able to adapt to student's learning needs
- Communicate with respect
- Communicates expectations clearly throughout the placement
- Provide feedback to support learning
- Assess student performance in a timely and effective manner
- Encourage critical thinking/problem solving
- Help student(s) transition from classroom to practice setting
- Model professional behaviours, skills and attitudes

ExEd programs do generally state goals and objectives of preceptor development programs. At time of writing, 4 of Canada's pharmacy schools – Dalhousie, the Universities of Toronto (U of T), Alberta (U of A) and British Columbia (UBC) preceptor educational *goals* have been clearly articulated, from which training content is clearly derived. For example, at UBC, preceptors are meant to:

- *Understand the importance of welcoming students to a practice education experience*
- *Know how to establish the preceptor/student relationship*
- *Identify the key elements of a successful orientation to the practice experience site*
- *Understand the roles of preceptor and student*

At the U of T, it is similarly hoped that:

Upon completion of requirements to become a ...preceptor, participants will be able to:

- *Apply specific teaching skills and principles to optimize APPE rotations*
- *Access resources available within the APPE preceptor community*
- *Incorporate learning styles theory to improve the quality of workplace learning*
- *Use feedback techniques to enhance student performance*
- *Apply principles of stages of learning, awareness of preceptor roles, and methods of clinical teaching and assessment to effectively conduct an APPE rotation*
- *Reinforce the patient care process used by students in their provision of direct patient care*

Dalhousie's goals are stated as categories of content that organize specific learning objectives:

- *Role of the Preceptor*
- *Teaching Methods and Learning Styles*
- *Evaluation and Feedback*
- *Supporting Students' Learning Needs*

U of A has 2 levels of live Preceptor Education: 1 and 2.

Level 1 Goal: Setting you and Your Student up for success.

Level 2 Goal: Precepting your Student- Tailoring Supervision and Assessment.

At these universities, these articulated educational goals appear to directly inform the specific learning objectives and content of their online preceptor training modules. These three schools' training module content is quite similar to that across the nation's other pharmacy schools, where such goals appear unarticulated.

Interviewees were asked to verbalise their respective preceptor development/education philosophies during interviews. None were able to immediately recite such a statement but U of A was able to provide the list of desired preceptor characteristics (see above). It is vital to have such statements to ensure alignment in desired aims, goals and learning outcomes for a preceptor development program

Preceptor Training/Development/Program Content

Five primary subject areas comprise content across most Canadian pharmacy schools:

1. Parameters of the preceptor role
2. The range of possible learning styles students may exhibit
3. Setting expectations and providing constructive feedback and formal assessment to students
4. Supporting students in succeeding in their placements
5. Managing conflict and challenging situations

In addition, most schools orient preceptors to the policies and procedures that govern experiential education at their faculties, such as those pertaining to formal assessment, attendance and absenteeism whether through written guides, or live and online presentations.

Across schools, training programs range from 3 to 8 hours in duration, although some online training modules can presumably be completed according to the participant's pace. U of A's live offerings offer 2 levels of workshops. The first is a basic level that equates to the modules available via UBCs and Dalhousie's online modules whereas the second level covers topics of supervision and preceptor roles, feedback and assessment and the patient care process.

Online vs. Live Trainings

In recent years, the majority of Canadian pharmacy schools (including the Universities of Alberta, British Columbia, Dalhousie, Laval, Montreal and Western) have offered or referred preceptors to online preceptor training courses. This is a notable addition to live training sessions. ExEd Programs – such as Saskatchewan and Alberta recognise the benefit of face-to-face meeting with novice preceptors and attractiveness to some types of learning styles and continue to offer some live sessions as well. In U of T and Saskatchewan's case, live trainings have been recorded, and available online. Live, in-person sessions between once (Waterloo) and 7 (U of A) times per year. And live-distance sessions more rarely occur (U of A twice annually). Rather than develop their own modules, some universities - such as Manitoba, Memorial and Saskatchewan - have elected to use other schools' asynchronous online training courses for educating preceptors; the University of British Columbia's interdisciplinary 'E-Tips' training program has for instance been widely adopted. Interviews with key stakeholders provided insight into the relative advantages and disadvantages of online asynchronous versus live preceptor trainings. Most interviewees agreed that online trainings had significant advantages, and were largely preferable to live training for reasons of scheduling, location and cost effectiveness. Indeed, provision of online modules permits aspiring preceptors to complete trainings at a time convenient for them, without need for significant travel. In large provinces, where live trainings may have previously been held in urban centres, the existence of online trainings permits a greater geographic reach for effective preceptor recruitment. And while there are certainly initial costs associated with developing online training modules, these are significantly offset, long-term, by eliminating costs associated with space rental and food offerings for aspiring preceptors, who are not typically asked to pay for access to preceptor trainings. Interviewees identified the lack of social interface as one potential disadvantage of online trainings as these individual learners are unable to benefit from networking and discussion opportunities with mentors and colleagues. Recognizing the diversity of learning styles, some stakeholders pointed out that all aspiring preceptors might not respond optimally to the same medium or mode of educational content. For instance, where some learners may find videographic modules to be an effective learning tool, others might prefer to read written materials, or interact in a live setting. In addition, some informants proposed alternate media such as online podcasts and electronic meeting room settings as potential adjuncts to existing modes of preceptor training. To date, such innovative training approaches do not appear to have been adopted in the context of Canadian pharmacy preceptor training. Also, no informants identified a focus of process (such as continuing learning communities) in PDP. Instead the focus was very much on content. The reasons for this are unknown but could be due to lack of knowledge, concern regarding the practicality and costs or perhaps it is not considered to be a priority at this time.

Mandatory vs. Optional (and tracking) PDP

Completion of preceptor training is mandatory for preceptors at most Canadian pharmacy schools, except for the Universities of Dalhousie and Manitoba, Saskatchewan and BC. At some schools, such as the Universite de Montreal, preceptors must renew/update their training every four years to stay current. That said, at several universities, no formal tracking system exists to monitor preceptors' completion of such trainings. Depending on how one interprets the CCAPP standard, this might be seen to be at odds with the stipulation that states ExEd Programs must establish preceptor training. In some provinces, pharmacists may earn mandatory professional continuing education credits for completing preceptor training programs. In addition, many schools offer preceptors additional incentives for completing preceptor trainings and becoming a preceptor, such as Adjunct Professor status within the pharmacy faculty and library access. No school pays preceptors to complete training although some are paid a stipend or per diem for each rotation they provide. A few informants seemed to be reluctant to make training/development mandatory. Reasons for this were not always explicit but may be related to preceptors potentially refusing and the loss of a potential rotation.

Selection of Preceptors

The criteria cited for deciding on whether a pharmacist is suitable (i.e. pre-screening) for the preceptor role was expressed by the University of Toronto Program: (draft form as of 2015). It differs from U of A's qualities of an effective preceptor above in that these are very much screening criteria whereas U of A's could be seen as development goals.

1. Possess a Pharmacy degree or other advanced degree. Applicants will be considered based upon practice and experience.
2. Have a minimum of two years of experience in their profession. Pharmacists who have completed post-graduate training require only one year of experience.
3. Maintain the appropriate licensure to practice.
4. Be in good standing with the applicable professional board.
5. Be willing to participate in Leslie Dan Faculty of Pharmacy Preceptor Development workshops.
6. Provide adequate time to regularly meet with the student. Contact time should be a minimum of 1-2 hours at least three times per week and may include a variety of clinical and non-clinical activities.
7. Show a commitment to professional development and life-long learning.

Once a preceptor, the individual would continue to be assigned students unless there were signals (survey results, missing submissions, other disciplinary information) that would compromise the learning of the student. At that point, students could be removed or, in lesser circumstances, remain but no further students would be assigned.

Preceptor Development Program Creation

Schools have taken diverse approaches to the development of their respective preceptor training strategies. The University of Toronto, for example, developed some content internally within the Faculty of Pharmacy, but outsourced development of some aspects of their training modules to continuing professional development experts. At the University of British Columbia (UBC), a task force was formed, engaging a variety of stakeholders, including: pharmacy educators from within the institution, staff from their experiential education office, pharmacy students, and representatives from both independent community pharmacies and corporate community pharmacies. At UBC the content for pharmacy preceptor training was largely developed internally; that said, it drew significantly from content from the preceptor training program created within that university's Faculty of Medicine. Dalhousie employed an interprofessional team of academics, practitioners and students in establishing their interprofessional program. U of A used a student survey to identify aspects of preceptor performance that would benefit from improvement and subsequently built content to augment preceptors level of competence on those topics. Interviewees indicated that if preceptors want a one-stop place for their PDP, any offerings must be made available through a single electronic conduit. CPD departments should contribute content using sound media and modalities but the access and administration and discussion must occur in a central 'meeting place' whether face-to-face or electronic.

DISCUSSION

Overall, it appears as though most Canadian pharmacy schools are moving toward requiring preceptors to undertake either live or online-based training programs prior to working with students. Several multimedia training programs have been developed across the country to this end that cover a range of common topic areas. Content seems to be relatively harmonized across schools. Across interviews, key informants expressed an interest in consolidating existing resources towards a national PDP. Such a national program would not only permit a more consistent knowledge and skill base for preceptors across the country, but also streamline future resource allocations of expertise, time and money. None of the participants identified the research potential in CPD that might exist with the pooling of resources but the interview did not include an item on that topic.

There are a number of considerations in shaping such a national PDP. Currently, a considerable base of educational content has been developed across the country and internationally, which may preclude the need for future additional curriculum development for training preceptors. More pressing was the production of a program that surmounted certain logistical (access, administration, tracking) and pedagogical (different media and modes of education) issues. As one key informant proposed in an interview, a national preceptor education website might facilitate information sharing across the country, and could replace the current school-specific online training content.

One potential challenge involves particular school-specific content (e.g. around policies and procedures) that would need to be shared with preceptors working with a particular school's students; it is possible that brief school-specific handouts or videographic materials might need to complement a more generalized national PDP. Another potential challenge pertains to monitoring preceptors' participation in training programs; a centralized electronic database accessible by each school's ExEd office might keep records of persons who have completed PDP.

Vital in shaping a national PDP is a set of articulated educational philosophies, principles and goals and preceptor characteristics or competencies that inform preceptor education. This is noteworthy given that the majority key informants spoke repeatedly about the importance of such aims but yet could not articulate them when asked. If Canadian pharmacy schools do indeed move forward with a national preceptor training initiative, a key first step may be to more formally articulate the fundamental aims driving such an initiative – and the associated educational initiatives. Doing so would help establish the future directions for the national initiative – and may potentially raise additional questions as to the initiative's mandate.

Some of the issues that key informants raised in interviews, which to a certain extent tie into the question of overall aims, relate to the style(s) of educational delivery most appropriate for preceptor education. Interviewees had many ideas and questions such as:

- Is the current movement towards online training indeed meeting educational needs of learners with diverse styles?
- Might there be a place for novel training approaches, such as self-directed learning, support groups; or for portfolio-based vs. test-based or direct observation evaluation of preceptor competency?
- In the near future, when the entry-level Pharm D starts at our Faculty, we will need many more rotations to provide an entire final year of rotations. Can we make preceptor development mandatory and not risk losing precious potential preceptors?

CONCLUSION

PDP in Canada use multiple modes and media to deliver a consistent content for novice preceptor training in an attempt to satisfy the needs of a wide-range of pharmacists wishing to become preceptors. Some jurisdictions insist on preceptor training and others consider it optional. The shift to online independent learning, although convenient and somewhat effective, precludes the benefit of learning in a social environment and makes deeper learning unlikely (See Report #2 in this series). There is a strong appetite for a consolidation of PDP on a national level but ExEd philosophies, learning theory, missions, aims, goals and learning outcomes will need to be collaboratively developed so that the content, media and modalities can be chosen wisely and developed considerably. To date, ExEd programs have managed to deliver content through mainly independent development but recognise there is other excellent content and effective media and modes in existence both domestically and abroad. Stakeholders to date believe a concerted product should bring the right educational intervention to preceptors at the right time. Report #3 in this series tables a cutting-edge, high-quality prototype to meet this expectation.

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