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For a complete list of contributors to this and other CanExEd reports please refer to the "[CanExEd Foundational Information](#)" document.

List of Abbreviations:

AACP-American Association of Colleges of Pharmacy
 AFPC- Association of Faculties of Pharmacy of Canada
 ELPD – Entry Level Doctor of Pharmacy Degree
 CanExEd- Canadian Experiential Education Project for Pharmacy
 CPhA-Canadian Pharmacists Association
 CSHP-Canadian Society of Hospital Pharmacists
 ExEd – Experiential Education
 NAPRA-National Association of Pharmacy Regulatory Authorities
 OEE – Office of Experiential Education
 PEP-C – Pharmacy Experiential Programs of Canada
 SC-Steering Committee

Universities:

MUN – Memorial University of Newfoundland School of Pharmacy
 Dal – Dalhousie University College of Pharmacy
 U de M – Université de Montréal Faculté de Pharmacie
 U of T – University of Toronto Faculty of Pharmacy
 U of W – University of Waterloo School of Pharmacy
 U of M – University of Manitoba Faculty of Pharmacy
 U of S – University of Saskatchewan College of Pharmacy
 U of A – University of Alberta Faculty of Pharmacy
 UBC – University of British Columbia Faculty of Pharmaceutical Sciences

Executive Summary

Introduction: Priority 5 Report: *Optimisation of Preceptor Recruitment and Retention* is the 5th of 7 reports comprising the CanExEd Project. Pharmacists in practice have already been vetted as being a desirable member of the organisation when they were hired. This may be an indicator that the individual is competent in their practice but whether they possess the skill set to be a good teacher may not have been evaluated. Maximising retention of preceptors is beneficial as their experience is valuable to students and successful retention results in less expenditure on recruitment. ExEd programs are mandated to ensure students have productive, high-quality preceptors and resulting learning experiences. The advent of the ELPD has major impact on the demand for preceptors and the resources required to supply these valuable human resources.

Methods: Searches for relevant **peer-reviewed literature** from the last 10 years were conducted using established educational, science and health professions databases. In addition, academic interviewees provided citations (peer reviewed and grey) pertaining to the benefits and risks of having students on rotation. Relevant articles were retrieved, reviewed in detail, analysed using a structured data extraction guide and appraised for quality. **Semi-structured interviews** with key informants were conducted to describe the current situation with respect to preceptor recruitment and retention and future concerns.

Results: Sixteen interviews were completed in 2015, seven hundred potential abstracts reviewed of which 65 were deemed relevant and three pieces of grey literature were identified in the course of the research. Currently in Canadian Pharmacy ExEd Programs there is a perceived need to plan and orchestrate a recruitment and retention strategy in the view that the ELPD rotations require a steep increase in preceptor numbers. Recruitment criteria were minimal where they do exist in Canada. Strategies currently used run from recruiting at conferences to word of mouth (referrals) and targeted phone calls. ExEd faculty agreed that communication, regular feedback, continuing professional development (CPD) in the sphere of education, gifts, status enhancers and remuneration were all ways of recruiting and retaining preceptors.

The Literature was appraised as being generally medium in quality and predominantly American in origin. Recruitment literature suggests macro (tacked onto residency training, educational 'streams' in the Pharm D, regional cohorts of academic institutions, partnerships with large chains and medical centers, paid or co-funded ExEd positions, recruiting former students) and microscopic strategies (advertisements, word of mouth, chain contacts, responding to spontaneous inquiries) are being used in health care professions ExEd. There were 3 major interrelated themes regarding retention:

1. Effective preceptoring experience
2. Intrinsic benefits
3. Satisfaction of the preceptor

Whether these result in increased retention has not been definitively proven.

Discussion: Seventeen recommendations have been made to bring a consolidated national approach to recruiting and retaining Canadian Pharmacy Preceptors.

Conclusion: Pre-ELPD Canadian Pharmacy ExEd programs have managed to date with generally ad hoc approaches to recruitment and retention however there is recognition that a more organised, consistent approach is required as the ELPD horizon nears. The literature provides instruction on how to pursue short and longer term plans for recruitment and retention on a jurisdictional and national scale.

Detailed Summary

Introduction: Priority 5 Report: *Optimisation of Preceptor Recruitment and Retention* is the 5th of 7 reports comprising the CanExEd Project. Pharmacists in practice have already been vetted as being a desirable member of the organisation when they were hired. This may be an indicator that the individual is competent in their practice but whether they possess the skill set to be a good teacher may not have been evaluated. Maximising retention of preceptors is beneficial as their experience is valuable to students and successful retention results in less expenditure on recruitment. ExEd programs are mandated to ensure students have productive, high-quality preceptors and resulting learning experiences. The advent of the ELPD has major impact on the demand for preceptors and the resources required to supply these valuable human resources.

The following questions were addressed:

1. What work is being done on recruitment and retention of ExEd preceptors across the country?
2. Can Faculties quantify how much of an issue recruitment and retention is?
3. Identify the most effective and discerning initiatives for recruiting new preceptors.
 - What content sparks pharmacists to investigate precepting?
 - Develop tools to discern whether a pharmacist is ready for precepting.
 - How should a pharmacist be inducted into the ranks of preceptors?
4. Describe the best approach for maintaining existing preceptors in the academy.
5. Identify barriers and facilitators to achieving these initiatives
 - What discourages preceptors from continuing in their role?
 - How these negative influences might be mitigated or avoided?
6. What indicators will show these initiatives to be successful?

Methods: Searches for relevant **peer-reviewed literature** from the last 10 years were conducted using established educational, science and health professions databases. In addition, academic interviewees provided citations (peer reviewed and grey) pertaining to the benefits and risks of having students on rotation. Relevant articles were retrieved, reviewed in detail, analysed using a structured data extraction guide and appraised for quality. **Semi-structured interviews** with key informants were conducted to describe the current situation with respect to preceptor recruitment and retention and future concerns.

Results: Sixteen interviews were completed in 2015 and seven hundred potential abstracts reviewed of which 65 were deemed relevant and three pieces of grey literature were identified in the course of the research. **Currently in Canadian Pharmacy ExEd Programs** there is a perceived need to plan and orchestrate a recruitment and retention strategy in the view that the ELPD rotations require a steep increase in preceptor numbers. Recruitment criteria were minimal where they do exist in Canada. Strategies currently used include:

1. Conference recruitment
2. Telephone recruitment
3. On-site ExEd recruiter

4. Targeted alumni recruitment
5. Resident training recruitment
6. Targeted print recruitment
7. Preceptor training confidence boosting for potential preceptors

Interviewees did not quantify the effectiveness of these strategies other than to indicate that to this point, they had managed to establish adequate rotations for their students. There are occasional cases where preceptors may be lost due to self-removal, however, most informants noted that there are currently few such preceptor losses at their respective universities, and should thus not be prioritized as a concern.

Retention strategies included measures to ensure preceptors feel valued and appreciated. Specific strategies included:

1. Effective communication
2. Regular feedback
3. CPD on teaching and learning
4. Gifts/perks
5. Professional status enhancers
6. Remuneration

The Literature was appraised as being generally medium in quality and predominantly American in origin.

Recruitment literature suggests macroscopic scale strategies (tacked onto residency training, educational 'streams' in the Pharm D, regional cohorts of academic institutions, partnerships with large chains and medical centers, paid or co-funded ExEd positions, recruiting former students) and microscopic strategies (advertisements, word of mouth, chain contacts, responding to spontaneous inquiries) are being used in ExEd health care professions in the Western world

There were 3 major interrelated themes regarding retention:

1. Effective preceptoring experience

Subthemes:

- Attributes lending themselves to effective preceptorships
- Knowledge and skills that can be developed to ensure effective preceptors
- Supporting resources for achievement of successful student rotations
- Experience in teaching completes a feedback loop to ever-improving preceptor-student experiences

2. Intrinsic benefits for the preceptor are more highly valued than extrinsic ones.

Subthemes:

- Workflow improvements
- Giving back to the profession
- Witness to student growth
- Enjoyment of teaching
- Update to preceptor knowledge through student

3. Satisfaction of the preceptor results from the intrinsic benefits mainly but there are some extrinsic influences that can augment satisfaction levels:

Subthemes:

- Quality of the student. How well the student meets the expectations of the preceptor
- Recognition through awards, performance reviews, career advancement, token indications of appreciation (celebrations, pins, plaques, notes, etc.), counting of preceptorship or CPD in teaching and learning toward licensure renewal, teaching in labs/lectures/workshops, and faculty appointments
- Rewards such as CPD opportunities, tuition wavers/rebates, grant or manuscript writing, remuneration
- Organisational benefit
- Patient benefit

Whether these result in increased retention has not been definitively proven.

Barriers have been extensively described in the literature to either commencing or continuing in the role of preceptor. Those most commonly listed include:

1. Unaware of the option to teach in the field
2. Lack of time/heavy patient load
3. Lack of training/confidence in assessing, providing feedback,
4. Stress of added duty/role overload (unsupportive environment)
5. Role conflict (preceptor not included in job description/job reviews)
6. Unprepared or difficult students
7. Expansion of class size and programs resulting in competition between programs

These barriers can be avoided or minimised through ensuring the items identified within the major themes for retention are addressed.

Discussion: Seventeen recommendations in three broad categories have been made to bring a consolidated national approach to recruiting and retaining Canadian Pharmacy Preceptors. They include:

A. RECRUITMENT

1. **Maintain relationships with alumni** through liaising with them directly or through the alumni relations office at the Faculty since it's much easier to recruit from a body of pharmacists already affiliated with the institution than unknown preceptors.
2. **Network with professional organizations** on local, provincial and national levels. Establishing and maintaining these relationships provides a meaningful conduit for macroscopic recruitment and retention efforts not to mention strengthening of the ExEd 'product'. Speaking at their conferences, meetings and using their communications conduits are efficient, effective ways of providing and collecting valuable information. Forming strategic advisory committees of local decision-makers facilitates preceptor identification and engagement within each of their staff membership
3. **View and engage students as future preceptors** translates into raising the concept with students that they too will be expected to teach learners in the field. The point of readiness to precept is variable depending on the practitioner but 1-2 years of experience has been identified in Canada as being the optimal time for a pharmacist to begin in a precepting role. Some ELPD programs have offered aspects of preceptor development to final year students as a way to prepare them for peer learning opportunities and for future preceptor roles.
4. **Evaluating current needs and plan for future growth** is extremely important given this is a time of immense change in the supply and demand of preceptors with the ELPD transition across the country. A formal short-term (1-3 year, depending on the university Faculty) recruitment plan along with a long-term maintenance plan that changes gears once the need for preceptors levels out are needed.
5. **Consider reengaging with former preceptors.** They may have had reasons for not continuing in their role that could be surmounted. These are individuals with valued educator experience

B. RETENTION

Effective Preceptoring Experience

6. **Include in the syllabus a statement of patient care duties students should be able to independently complete** at each stage of their rotations. Careful monitoring of preceptor and student perceptions of ability is necessary for the first few years of a new program.
7. Facilitate collegial support by offering training **sessions to support staff** within rotation sites so that technicians, assistants, administrative staff understand what the preceptor and student goals and expectations are and how they can contribute to a positive learning experience for the student and a supportive environment for their preceptor colleague. See Priority #6 report for further detail on this recommendation.
8. **Provide on-going support to preceptors.** Given that preceptors support over thirty percent of the curricular load, they merit high degrees of resourcing from Faculties and employing organisations. ExEd faculty should make an effort to know their preceptors and their motivations so that they feel heard and valued. Preceptors need **accommodation and allowances** in workload to allow them to be effective educators (and prevent burning out in the role). ExEd offices should open up discussion with supervisors and organisations about reasonable workload reductions. **Regular communication** regarding outcomes and accomplishments in the form of email, phone calls, visits and newsletters indicates respect and appreciation for their work. Implementing **advisors/educational facilitators** is an effective way of supporting preceptors and the uptake of best ExEd/teaching practices that has been implemented in some practice environments and should be considered where high student concentrations merit the investment. It is also a way of forming groups of educators.
9. **Create a standardized (national with unique program-specific components) orientation for new preceptors and ongoing continual development for experienced preceptors.** Priority #3 of the CanExEd Project instructs on the details of a National Preceptor Development Program (PDP). The PDP will ensure CPPD is flexible in medium, mode and timing so that preceptors can access it at will, through a medium conducive to their learning style and conveyed for immediate practical application to their teaching and learning efforts. Learning is facilitated by interaction with peers (learning communities) so the PDP should include networking opportunities (face to face or electronic) to exchange ideas with one another.

10. **Standardize assessments based upon competencies** for all of pharmacy programs. This streamlines the process for them and helps preceptors who may be supporting multiple schools or programs. Priority #1 in the CanExEd Project provides guidance on this front.
11. **Create a National advisory board of preceptors** from a variety of practice settings to help shape changes to the experiential component of the curriculum (including preceptor development). This may exist in each jurisdiction but a board may be advisable to maintain standards Nationally.

Preceptor Satisfaction

12. **Acknowledge preceptors for their efforts with special designations** and awards for their accomplishments. Rather than simply being acknowledged at the university or program level, if preceptors could be acknowledged with a **national award and national designations**, it brings cohesiveness across the country.
13. **Partner with other pharmacy** education programs (ExEd, residency programs, regulatory agencies) preceptors and students to offer joint trainings and the utilization of similar assessment rubrics and rotation management technology. By not dividing loyalties between programs, everyone benefits.
14. **Invite and involve preceptors in teaching and admissions interviews**, etc. so they feel vested and valued in the program from start to finish.
15. **Recognise preceptors** according to the programs means and preceptors' desires through rewards and recognition. A range of actions could be used. Maximally, a national preceptor of the year award and minimally, a note of thanks would be appropriate. Faculties must offer academic appointments to preceptors according to CCAPP standards. ExEd faculty should ensure the promotion and communication this opportunity to preceptors as it appears they (or their managers) are not aware that this is the case (personal communication from national CSHP issues day to PM)
16. **Consider the changes in the community, country, and world** as a whole and contribute to meeting the needs of an aging population, depressed economy, and/or growing healthcare costs. Publicise impacts so that preceptors are excited, engaged and proud of their association with academia.
17. **Make precepting count toward CPD requirements**. Continuing education credits or competency evaluations (depending on the jurisdiction) are necessary for license renewal. Achieving reflection and professional development in the sphere of teaching and learning fits within all renewal processes and should be promoted to pharmacists as a valid and important part of their CPD.

Quality outcome measures tracked on an annual basis across Canada include satisfaction level of preceptors and students (intermediate outcome) and recruitment rates and retention rates (programmatically significant). In addition, longitudinal trends and benchmarking could be attractive to some Faculties struggling with recruitment and retention and the resources needed to achieve solvency.

Conclusion: Pre-ELPD Canadian Pharmacy ExEd programs have managed to date with generally ad hoc approaches to recruitment and retention however there is recognition that a more organised, consistent approach is required as the ELPD horizon nears. The literature provides instruction on how to pursue short and longer term plans for recruitment and retention on a jurisdictional and national scale. Concerted recruitment and retention efforts by Canadian ExEd programs should be carefully studied and reported for the benefit of other programs, jurisdictions and professions.

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I. Introduction

A. Preamble

The Canadian Experiential Education (CanExEd) Project for Pharmacy contributors, context, scope, objectives, intended audience and application for all seven Priorities of the project are available in a separate document entitled, “[CanExEd Foundational Information](#)”. Appendices for all the reports are contained within the document, “[CanExEd Priority 1-7 Appendices](#)”.

B. Previous and Upcoming Reports

This is the fifth in a series of seven reports delivered between 2014 and March 2016. All reports are available online within the Association of Faculties of Pharmacy of Canada (AFPC) at: <http://afpc.info/content/canexed-reports>. Priority #4: Description and Promotion of the Value Students Add to Host Organisations and their Mandate focused on the benefits organisations, patients and to some extent preceptors experienced through participation in ExEd rotations. Communicating the content of Priority #4 to preceptors (current and potential) would be of utility in recruitment and retention strategies. Priority #4 stopped short of including a major discussion on the topic of intrinsic benefits preceptors experience through their involvement with student learning due to much of that literature originating from the recruitment and retention literature and for comprehensiveness, was relegated to this Priority #5.

C. Background

This report communicates the investigation and findings of the current state of Experiential Education (ExEd) in Canadian Pharmacy Programs, best practices and recommendations to achieving best practice relating to CanExEd Priority #5:

Optimisation of Preceptor Recruitment and Retention

Context: Faculties of Pharmacy across the country are at various stages of transition from Baccalaureate of Science of Pharmacy (BSc Pharm) degree as the entry-to-practice degree to an entry level Doctor of Pharmacy (ELPD) degree. At time of writing, 5 schools (two fully-transitioned in Ontario, two in Quebec and one in BC in the first year of transition) had transitioned to the ELPD. The remaining 5 schools are expected shift to ELPD between 2016 and 2020. In the US this shift occurred in the 1990’s-2000’s. Implications of the transition are dramatic and include a changed curriculum with 25-30% of a student’s academic degree spent learning in the field during early, intermediate and advanced practice experiences. The increase equates to an approximate increase of 2.5 times the amount of ExEd within the pre-existing entry to practice Canadian Bachelor of Science in Pharmacy (BSc Pharm) degrees. This increase in ExEd results in a greater reliance on pharmacists to supervise students on rotation. In effect, these pharmacists become part-time faculty members. Successful administration of the quantity and duration of rotations distributed throughout the academic calendar year requires an expanded cadre of effective pharmacist preceptors. Recruitment and retention efforts enter a growth phase as programs approach intake of their first year of their respective ELPD programs and eventually take front-and-centre stage as the first year of advanced pharmacy practice rotations loom. Once the initial cycle of the advanced practice rotations has passed, a maintenance phase of recruitment and retention efforts ensues over the span of a couple of years.

Mechanisms to **recruit** preceptors into the academy are necessary to ensure initial selection includes those with the inclination and support to host and educate students. Measures to ensure **retention** of desirable preceptors throughout their careers are necessary to maintain these valuable human resources that have equally invested their time and energy into becoming preceptors. Minimizing attrition rates of preceptors results in a lower need for new preceptors thereby allowing for careful selection in recruiting well-suited pharmacists for precepting. In this time of educational need (transition to ELPD, encouraging multiple students simultaneously present at a site) and practice change (novel reimbursement strategies, technician regulation) and challenging fiscal times, attrition rates of preceptors might be expected to rise just when these individuals are needed most.

National organisations that address preceptorship or educating in the field include:

1. **NAPRA:** The fourth overarching concept in, [Professional Competencies for Canadian Pharmacists at Entry to Practice](#) states that pharmacists “Act as mentors to promote the growth and development of the profession.”

This indicates that practicing pharmacists will work with learners in some capacity and that the role of mentor or educator is not limited to a subset of the profession but rather all pharmacists are or can be equipped for the role. This role may be guiding newly hired colleagues, pharmacy technicians, international pharmacy graduates, new

graduates on internship (in jurisdictions still using this model), residents, undergraduate or graduate students on rotation. While this report focuses on recruitment and retention of pharmacists for the role of precepting within academic institutions' ExEd programs, other programs may find this work applicable.

2. **AFPC:** Within the Professional domain of competency, pharmacy graduates of First Professional Degree Programs of Pharmacy in Canada are expected to, "Display a sense of pride in and commitment to the profession and its evolving role in the health care system." therefore, "participate in education of future pharmacists by making practice-based learning opportunities available as a mentor / preceptor."

Inclusion of this statement from Professional competencies for Canadian Pharmacists at Entry to Practice illustrates the expectation that all graduates will be able and willing to participate as educators in the field. This forms an important prong of a long-term recruitment strategy.

3. In July 2007, **AACP** approved a revised Oath of a Pharmacist to include a statement of commitment of the graduate pharmacist to, "utilize my knowledge, skills, experiences, and values to prepare the next generation of pharmacists."
4. **FIP** in 2014 approved an Oath that included the statement "I shall nurture the preparation of future members of my profession."

Taken together, there is a definite recognition that pharmacists broadly will be able and expected to host learners in some capacity. This supports the ideal that pharmacists seek out opportunities to teach and guide. The reality is however quite removed from that ideal at this point and so Universities' ExEd programs are faced with having to mount efforts to ensure new and old preceptors are available to fulfill their mandate of providing quality placements for their respective students.

5. To that end, **CCAPP** 2012 standards provide some guidance for ExEd Programs on the resourcing of pharmacist-preceptors within **Standard 29** of the Accreditation Standards for the First Professional Degree in Pharmacy Programs (2014), "The Faculty must ensure that there are adequate personnel, resources, practices, and systems in place to support student learning and skills development at the practice sites selected for student practice experiences and those practice experience sites must meet relevant regulatory requirements. (1)

Given that recruitment and retention are necessary to ensure the effective education of new practitioners and efficient functioning of ExEd and indeed the Pharmacy Curricula across Canada, this report describes concerted efforts directed at Recruitment and Retention.

II. Priority 5: Optimisation of Preceptor Recruitment and Retention

A. Priority Description

In order to address this priority, research was undertaken to:

- Determine current approaches to recruitment and retention in Canada and internationally
- Describe best practices relating to recruitment and retention
- Consider ways to achieve these best practices through recommendations and prototypes

B. Research Questions

The following questions were developed iteratively through the work of the project team and integration feedback from the PEP-C group and SC in order to address these goals:

1. What work is being done on recruitment and retention of ExEd preceptors across the country?
2. Can Faculties quantify how much of an issue recruitment and retention is?
3. Identify the most effective and discerning initiatives for recruiting new preceptors.
 - What content sparks pharmacists to investigate precepting?
 - Develop tools to discern whether a pharmacist is ready for precepting.
 - How should a pharmacist be inducted into the ranks of preceptors?
4. Describe the best approach for maintaining existing preceptors in the academy.

5. Identify barriers and facilitators to achieving these initiatives
 - What discourages preceptors from continuing in their role?
 - How these negative influences might be mitigated or avoided?
6. What indicators will show these initiatives to be successful?

C. Methods

A detailed description of the methods including data sources, data collection and appraisal system used in the Project are contained in, “[CanExEd Foundational Information](#)”. The methods section here provides the particular approach unique to this Priority.

Semi-structured interviews

An interview protocol was developed in 2014 to explore topics related to Priority #5. The interview used semi-structured questions to guide discussion. [Appendix A](#) provides the complete guide.

General and Peer-reviewed literature

[Appendix B](#) provides specific search strategies employed to identify relevant citations. [Appendix C](#) contains the structured data extraction guide used in the appraisal process.

D. Results

1. Process

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.

General and Peer-reviewed literature

Seven hundred abstracts were initially identified and reviewed for relevancy. Of those, 65 were determined of interest and were reviewed in detail. ([Appendix D](#)).

Grey Literature

Through consultations with members of the SC and PEP-C group, important pieces of grey literature were identified. [Appendix E](#) contains these documents.

2. Findings

Semi-structured interviews

Entry Requirements for Preceptors

The basic requirements for a prospective pharmacy preceptor in Canada consist of:

1. Possession of a recognized pharmacy degree or other professional qualification where supervisor is not a pharmacist (in DPC rotations) and potentially non-healthcare professional designations for non-DPC rotation.
2. Good standing with a provincial regulatory body (but this is not consistently ascertained in every ExEd Program).
3. Practicing for at least 0.5-2 years (Faculty dependent)

4. Regulatory minimums: Some PRAs have guidelines re: permission to precept and how supervising of students is conducted.

Other statements that are included in baseline requirements for U of A include:

- Practice at a level of proficiency that enables him/her to meet the course requirements
- Be a role model for students by having an ethical and professional practice
- Have the skills, time and support available to facilitate the student's learning experience

Finally, The University of Toronto has developed guidelines that must be met in order to serve as an advanced pharmacy practice experience preceptor. Please see Appendix E for this statement.

Capacity issues

Some programs by their insistence on having new preceptors complete a basic training/education also implicitly have another requirement for prospective preceptors: To be willing to complete further education in teaching and learning. Informants suggested that some pharmacists who do not have the PharmD designation might feel unsure how to adequately support PharmD students, in the sense that such students may have more formal training in some areas than the preceptors themselves. Informants were cognizant that they would have to ensure that Bachelor-trained pharmacists would be reassured that having a Pharm D is not a requirement and that their experience practicing the profession and their willingness to be a role model and allow a student to access their patient population were equally as important as their academic credentials

There was a tension identified between increasing the entry requirements and establishing sufficient numbers of rotations for students. This theme is discussed within 'Quality Assurance' below however, there was an indication the ideal scenario would include a statement of baseline qualities that should be considered when preceptors and ExEd programs enter into a relationship. This tension was increasing for Faculties on the verge of transitioning to ELPD as there would be a rapid upswing in the number of required preceptors to meet the increased rotation numbers.

Current Preceptor Recruitment Strategies

Informants discussed a range of strategies currently employed by pharmacy Faculties in recruiting preceptors for participation in their ExEd programs. *Word of mouth* was consistently described as an important recruitment source. Although some informants described use of 'mass' recruitment strategies (such as generic emails) sent to all pharmacists in the province, most agreed that 'targeted' recruitment strategies were much more likely to yield good results (rather than - as in the case of mass emails - be ignored or deleted). The following targeted recruitment strategies were identified:

1. *Conference recruitment:* ExEd offices commonly use booths at pharmacy conferences, aiming to reach a range of prospective preceptors in person.
2. *Telephone recruitment:* Some ExEd offices telephone prospective preceptors directly, acquiring their contacts through the provincial pharmacy association, PRAs, business websites.
3. *On-site recruitment:* Some pharmacy programs (U of A, U of W) has hired a full-time, dedicated preceptor recruitment agent, who travels to hospitals and community pharmacies to do direct outreach to prospective preceptors. One (UBC) also recognized that their faculty-hired hospital ExEd coordinator as a side effect, has improved recruitment results
4. *Targeted alumni recruitment:* Seeking to recruit preceptors who have graduated from their own schools, some ExEd offices send out mass emails to their alumni 2 - 3 years after graduation.
5. *Resident training recruitment:* Some schools provide preceptor development workshops to pharmacy residents, aiming to get them interested in preceptorship in advance of their entry into the professional workforce. The Canadian Pharmacy Residency Board Residency Accreditation Standards require a teaching component in the year of residency training. This requirement should prime the resident to take students immediately upon certification. Whether this has actually evoked the intended effect is unknown.
6. *Targeted print recruitment:* Some universities prepare informative pamphlets on preceptorship for distribution to pharmacists attending continuing education workshops. Paper recruitment materials focused on the value added by students to practice sites are being created, with the aim of distribution to potential sites and preceptors.

7. *Preceptor training recruitment:* The increasing availability of and outreach around preceptor training programs at universities has become, in itself, a useful recruitment strategy: pharmacists who may have wanted to be a preceptor but were unsure how to go about it, have thus been reassured about their preparation before coming into the fold.
8. *Regional coordinators:* U of W uses regional coordinators as recruiters. UBC uses hospital liaisons as support for struggling students, which may secondarily impact on recruiting preceptors.

Interviewees did not quantify the effectiveness of these strategies other than to say the ultimate indicator has always been attained: To provide sufficient numbers of rotations to meet the needs of students. Of all the transitioned (to ELPD) faculties, none indicated that they had formalized plans for recruitment. PEP-C members have a process whereby each year, they send out mass communication to existing preceptors and follow up with individual communications. The University of Toronto (U of T) used a few strategic components to increase the number of preceptors (and therefore rotations) available to the 1st, 2nd and 3rd year students as the curriculum migrated to the ELPD. Because the major supply challenge was in institutional practice, U of T struck an institutional advisory committee where the clinical / education coordinators from every hospital in the Greater Toronto Area would have a monthly/bimonthly opportunity to feedback on the development of the Advanced Pharmacy Practice Experience (APPE) syllabus (including policy, learning objectives, assessment, expectations), preceptor development and the duration of rotations. Also at these meetings, attendees had opportunity to discuss their individual challenges with current rotations and how well they were managing to establish rotations for upcoming rotations. The ExEd program early on identified the numbers of rotations they would need and the deadlines so that these coordinators understood the volume of needed rotations. New models of peer learning were introduced as well in an effort to respond to the varying needs of practitioners.

The University of Alberta (U of A) is close to commencing their ELPD curriculum and has a more formalized plan for achieving their required number of preceptors/rotations.

There are occasional cases where preceptors may be lost due to self-removal, however, most informants noted that there are currently few such preceptor losses at their respective universities, and should thus not be prioritized as a concern. That said, there are currently no formal mechanisms in place at Canadian universities to identify, contact and reinstate lost preceptors; such processes are currently implemented on an informal basis.

Future Recruitment Strategies

Ideally, noted some informants, pharmacy schools would have a surplus of potential preceptors at the ready, who would then be systematically evaluated for suitability for particular educational purposes. However, they emphasized, Canada's pharmacy schools' ExEd programs have not yet achieved this ideal; nor has a strategy been identified to this end. However, in some provinces, novel recruitment strategies have been implemented (or which might, in future, form part of such an overall approach. Informants identified three such approaches:

1. *'Targeted Overtures':* Some pharmacy faculties will engage in highly targeted preceptor recruitment tactics, wherein they may directly approach particular individuals or practice sites with the aim of recruiting ('fishing for') pharmacists with specific expertise.
2. *Employment Expectations:* In many hospitals, precepting is increasingly included in pharmacist job descriptions; schools may thus make direct contact with these practice settings for recruitment purposes. Because both education and healthcare are provincially funded, healthcare has a mandate to ensure students have access to their facilities.
3. *Regulatory pressure:* The question was raised as to whether provincial regulatory colleges' codes of ethics might in future emphasize pharmacists' professional responsibility to help train future pharmacists. Codes of Ethics across the country do include sections on education that sets the stage for involvement in teaching. It may be that some ancillary documents directly promoting education as a CPD activity would be beneficial.

Preceptor Retention

Informants identified numerous ways preceptor retention could be maximized from year to year, and across sites. Overall, stakeholders agreed that the best way to retain preceptors was to ensure they feel valued and appreciated; this could be achieved through support or recognition:

SUPPORT:

1. *Effective Communication:* Keeping channels of communication open between university ExEd offices and preceptors was identified as a key mechanism for preceptor retention. In particular, ExEd offices' receptivity

and responsiveness to feedback and concerns from preceptors was characterized as being of prime importance. Informants emphasized that ExEd offices could also help preceptors stay engaged and feel involved in a broader preceptor community, by sharing relevant news and information with preceptors through newsletters and other online resources. In addition, some schools hire a faculty member as an intermediary to work with preceptors and students at multiple ExEd sites. Individual phone calls to preceptors to follow up on issues, or just to remain in contact and ensure they feel cared for are also effective. Although these strategies are financially costly, informants characterized this approach as facilitating communication, mutual support and collaboration between preceptors and schools, affirming for preceptors that their work was seen as valuable. PEP-C members identified the importance of being adequately resourced to maintain this level of support. There were concerns that with the increasing capacity needs, the multiple aspects of ExEd that had been managed in the past would no longer be as consistently achieved. Of particular concern was the time-consuming nature of individual communications

2. *'Regular Feedback'*: Preceptors value and appreciate student and faculty feedback on the quality of their students' experiences on rotation with them. Many programs offer student feedback on a semi or annual basis however, faculty-generated feedback was not mentioned as a regular practice for all preceptors. On-line evaluations may facilitate this occurring in future as this allows for information to be made directly accessible/available to preceptors at predetermined/automated intervals.
3. *'Continuing Preceptor Education'*: Providing high-quality offerings using various modalities and covering relevant content was identified as a retention strategy.

RECOGNITION:

4. *'Gifts and Perks'*: Although characterized as secondary to effective communication a secondary preceptor retention mechanism, informants consistently described various incentives or 'perks' granted or given to preceptors as creating a positive overall experience for them, and in turn, enhancing the likelihood that they would continue to act as preceptors from year to year. Ranging from gifts of pens, magnets and mugs, gift certificates or dinner to major 'perks' as access to university library resources (something they would not otherwise have), and waived/reduced registration fees for continuing education courses, informants described these types of incentives as helping to convey the university's appreciation for preceptors' contribution to pharmacist education. In addition, CCAPP states in standard 31.2: Preceptors and other clinical faculty employed by the experiential sites should be offered or be eligible for an appropriate academic appointment to recognize their critical role in the education of students. Such appointments should permit promotion in the relevant category according to established criteria.(1) This component of ExEd is extremely time-consuming and may be inconsistently achieved as workloads increase.
5. *'Professional status enhancers'*: Many pharmacy schools took steps to give explicit recognition to preceptors for their educational contributions, including granting preceptorship certificates (sometimes with yearly renewal stickers); awards nights with plaques and at times cash awards to honour preceptors who had made a notable contribution (sometimes in the form of 'Preceptor of the Year awards); highlighting preceptors in newsletters, websites etc. and listing of preceptor names in a public online forum. In addition, some schools would offer preceptors honorary titles or status positions (such as 'Adjunct Professor' or 'Teaching Associate'), and/or issue an open invitation for preceptors to offer/teach in lecture-based courses or laboratories or continuing education courses for other pharmacists; invitations to participate in steering committees or task forces to improve education. Informants characterized these approaches as potentially improving preceptors' professional profiles or sense of credibility.
6. *'Remuneration'*: Was occasionally mentioned as a potential incentive for preceptors to continue in the role. Some Faculties do provide a stipend to preceptors and practice sites for their work with students however it is becoming less desirable or realistic as the cadre of preceptors is increasing and the budgetary implications are untenable. In some sites, there are fees associated with the placement and that students are often responsible for covering those fees.

Quality Assurance/Improvement

Some informants noted an ongoing tension between recruiting an adequate number of preceptors to serve student needs (quantity), and upholding excellence in preceptorship (quality). There is rare use of guidelines (see Appendix E for the University of Toronto's statement) that stipulate screening criteria for preceptors and facilitate recruitment of excellent potential preceptors. There is a closely related document developed collaboratively by PEP-C that elucidates the desired qualities of a preceptor but these qualities/attitudes and abilities could be expected to develop upon initial training or experience in the role of preceptor. Pharmacy schools' increasingly formalized requirement that new preceptors undergo training before beginning duties has, according to informants, been of

great value in increasing the calibre of preceptorships. It is possible that programs have concluded that all pharmacists have the potential to be excellent preceptors and that with support and training, it is achieved rather than through stringent screening criteria for excellence. Beyond the initial potential for excellence, programs state their requisite initial training and ongoing responsibilities of the preceptor regarding training. The PEP-C group was asked in a survey whether there was a particular number of years' experience that practitioners should have before becoming a preceptor. Five of the 6 respondents believed there was and of those, 1 thought it should reflect what the PRA regulations stated and the other 4 believed 1 year would be the minimum. Five of the 6 thought that different level of ExEd rotations should not predicate the number of years experience a practitioner should have to precept. Two respondents mentioned the practice environment could facilitate having a very new practitioner precept if the environment was sufficiently supportive. Caution must be exercised in increasing the mandatory requirements as it may not be possible to procure sufficient preceptors to take all students.

Informants briefly discussed the identification and possible subsequent divestment of poorly performing preceptors from their university ExEd rosters. They stressed this was a rare step. Often times, the first indication that problems might be arising with a particular preceptor might emerge from negative student reviews. However, informants emphasized that student perceptions may or may not reflect the quality of preceptor work in all cases. That said, careful information gathering on the part of the ExEd office, and subsequent direct communication with between the office and preceptor, would facilitate clarification of the concerns raised. In many cases, such communication might prove sufficiently corrective; however, in rare situations, the ExEd office may need to remove the preceptor from their duties. The University of Montreal states that a preceptor, upon having been sanctioned by the College may only return to precepting after 3 years of no further disciplinary action (see Appendix

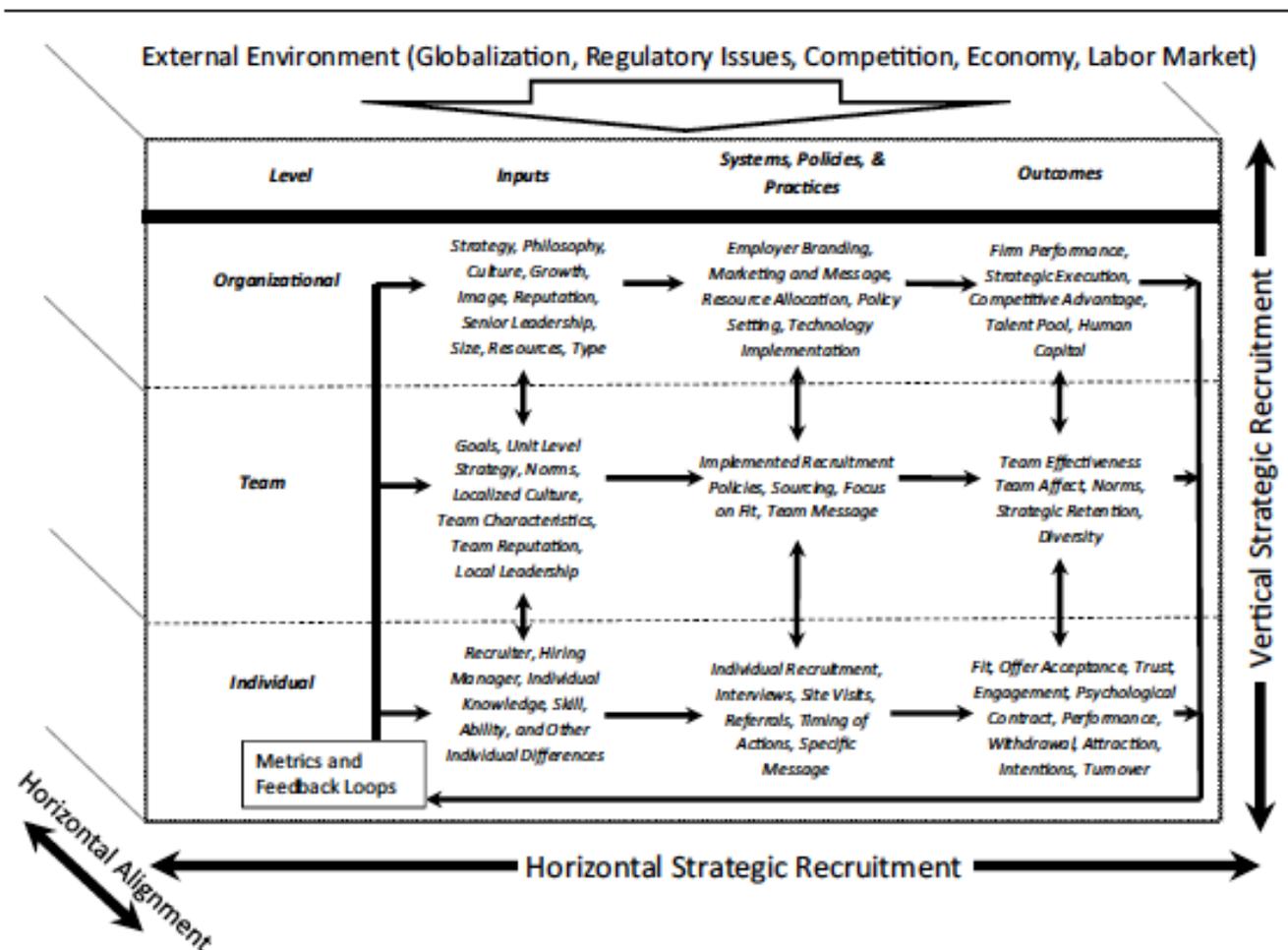
Informants indicated that neither attrition rates nor the requirement for new recruits were formally tracked on an annual basis so there was no firm quantification (beyond the ability to meet the current need of the program) of the recruitment and retention issue.

General and Peer-Reviewed Literature

General human resources (HR) and psychology literature was examined concurrently with health care professions citations on the topic of recruitment and retention. Although this literature may have limited generalizability due to the setting being employees within corporate organisations rather than employees **voluntarily** accepting and continuing with the precepting role within the structure of their employment, it does serve to highlight concepts and strategies that may have crossover applications.

Recruitment: The business press indicates that there is a higher level of recruitment called *strategic recruitment*(2). It refers to recruitment practices that are aligned with goals, strategies, context and characteristics of the organization, the team and the individual who is charged with offering a position. Applied to preceptor recruitment, it suggests that ExEd offices should examine their mission statements and preceptor competencies for structuring their recruitment protocols and ensure individuals incepted into precepting meet the vision of the university, have attributes (knowledge, skills and attitudes) to work with the team within ExEd (coordinators, other preceptors, students) and finally how this potential preceptor interfaces with the person/s deciding whether to offer a position. A myriad of factors could come into play in recruiting preceptors. How much recruitment planning ExEd programs feel is necessary and realistic is debatable. The figure below represents the organizational, team and individual inputs, policies and practices and recruitment/retention outcomes considered in formulating a strategic recruitment plan(2).

Figure 1
Strategic Recruitment Model



Further to the individual inputs, how to best ensure that the recruiter/s makes a good decision is likely the crux of recruiting in ExEd. It's great if all the planning results in a clear plan of what the recruiter is looking for but ultimately, personal biases influence recruiters' decisions. To minimize bias, structured interviewing processes where questions are consistent for all candidates, (3) group interviews or series of individual interviews are implemented using interviewers who are already doing the job, direct reports, students and supervisors of the candidate (360 degree assessment). (4) In addition, the use of technology should be leveraged to collect, organize and analyse opinions, remarks and suggestions from those interfacing with the prospective candidate (4) In addition since the best predictor of future performance is past performance, interview questions should include items that ask the candidate to illustrate a time in the past when a particular trait or attribute came to the forefront to resolve an issue. (4)

It should be stressed that there is no research within healthcare that confirms these 'best practices' are rooted in outcome data however, in non-healthcare settings there is good evidence for the following recruitment strategies and associated intermediate (HR not patient) outcomes (5):

- Combined previews of the work improved impressions of caring, trustworthiness, honesty, commitment to the army, job satisfaction and lower turnover of more intelligent recruits.
- Management assessment scores at recruitment were predictive of level or position attained later in career
- Person-organisation fit measures predicted job satisfaction at 2.5 years later.
- Referrals from existing employees was effective in inducing higher productivity and lower turnover

Upon securing commitment to precept, efforts should follow to ensure that the preceptor **retention** rates remain high. As preceptors develop and grow, they become ever more valuable. While it may be unrealistic to expect preceptors to be excellent in their first few years in the role, eventually they should be excellent as a result of both their baseline characteristics and the programs ExEd has implemented to encourage CPD (teaching skills, research abilities, quality indicator development programs for preceptors' practices, etc.)

“A star is worth 5-10 average performers” (Jack Welch)

Contributing factors for maintaining the preceptor's presence and commitment to teaching provides instruction for ExEd offices. There is evidence within healthcare HR literature suggesting job variety had a negative association with intention to leave an Israeli hospital. (5) This may partially explain a nursing study that found nurses who precept are less likely to leave their positions (6). The second condition that has evidence to support higher retention rates is team work which suggests that preceptors should be made to feel as though they're not working in isolation but that they're part of a collegial group in the clinical teaching environment and a preceptor community where individuals are working toward a grand common goal of educating the next generation of practitioners. (5) Academics within business administration suggest some theoretical frameworks to describe human decision-making processes of which remaining in the preceptor cadre would be one decision. Of particular interest is Daniel Kahneman's Fast-Slow Thinking in which “duration neglect” and the “peak end rule” dictate how one remembers happiness levels. In situations of suffering or distress, the negative memory is heightened by the degree or magnitude of discomfort at the end of the experience rather than the duration of unpleasantness. What this may translate into is that a preceptor in a stressful or challenging rotation he/she will probably remember the negative experience more favourably if by the end of the rotation, the suffering is mitigated. The remembering self makes the decision whether to repeat the experience or not. It behooves ExEd programs to ensure the final days of a rotation are as positive as possible for the participants. (7)

“Odd as it may seem, I am my remembering self, and the experiencing self, who does my living, is like a stranger to me.” (Daniel Kahneman)

In normal situations where rotations progress and end well, how do preceptors decide whether to repeat the experience? Kahneman's work is applicable here too. When things are going well, the individual's decisions are based on emotion rather than rational thought. In effect, they are likely to agree to continue in role because their rational system may not be able to raise the idea of withdrawing.(7)

There are three populations of interest to ExEd Programs that received attention in the literature regarding recruitment and retention. The first, “Top Talent” population is a group of individuals seen as future leaders or particularly strong in their field. These individuals may have slightly different perspectives on continuing with their role(8):

- They are unlikely to be highly engaged (1/4 are intending on leaving) as they have high expectations and lots of alternatives. They expect to be treated well by having stimulating work, recognition and compelling career paths
- Current high-performance may not mean future potential. They may not actually continue to perform well in future roles
- High-performers often take a greater share of the workload. They should be commensurately rewarded.
- Highly talented individuals should be included in setting direction for the organisation. It demonstrates respect and perceived value.

The second is generational (Baby Boomers, Gen X, millennial) concerns. What attracts and retains different groups may be different than what most ExEd programs anticipate. A few key aspects to HR practices with them include (generalities) (9):

- Gen Xers will work a regular shift and do not have an interest in being workaholics. They fiercely protect their personal time, which means they often avoided or departed health care.
- Baby Boomers are quickly retiring. These experienced individuals should be enticed to stay and work with the next generation to pass on the leadership baton
- Millenials look for immediate responses to their inquiries so be prepared once you put out a call, to respond to replies of interest.
- Gen Xers and Millenials like to self-schedule and see career ladders.
- Millenials move between jobs quickly. May want to partner them up to maintain a connection to the organisation. As preceptors, it may be prudent to use their personal e-mails that follow them from job to job.

- Millennials will also wish for more frequent recognition programs and incremental opportunities in the form of specialised training. They may want to supervise even 1-2 individuals to feel like they're growing. Constant feedback is craved

The third population is volunteers. Volunteerism literature may have some application as preceptors are generally unpaid volunteers for faculty yet employees to the organisations. If employers include the role of educator in job descriptions and encourage and reward preceptors for their leadership, the volunteer designation may not apply but at the time of writing, inclusion of the role in job descriptions was the exception rather than the rule especially in community. Institutions are more likely to adhere to the practice of including preceptor within job descriptions in Canada. There indeed may be a particular demographic of pharmacist that finds this format of volunteerism attractive.

Volunteer Canada undertook a survey of volunteers in 2010 to collect national data about the changing culture of Canada's volunteer sector and the perspectives of youth, baby boomers, families and employer-supported volunteers. Findings that may be pertinent to preceptor recruitment and retention include (10):

1. Need to know who ExEd volunteer preceptors are in terms of age (retirement risk, preferences for commitment-baby boomers are generally long-term volunteers but they're retiring quickly), interests, passions and motivations (literature tells us this to some extent)
2. Past volunteer preceptors may be the best source of recruitment however, ExEd programs do not have an accurate sense of attrition rates or reasons for self-removal from the pool to determine if this is a good pool to revisit.
3. Descriptions of 'never preceptors' are available from physician assistant literature but it may be useful to know the profiles of pharmacists who have not engaged in an educator role in the event there are factors that ExEd can influence to make it more attractive
4. Group activities were desirable in this population. This could translate into preceptors wanting a social aspect to volunteering such as mentoring or support groups or a continued relationship with preceptors in undertaking CPPD.
5. Realise that some volunteers do not want to volunteer in a capacity that is related to their professional role.
6. Volunteers want control over when and where they volunteer. Coupled with this flexibility, they have a need for clarity of goals and expectations so a balance must be achieved.
7. Many volunteers are looking for short-term commitments although, if there is a perception of effectiveness, the individual may be willing to commit long-term. The closely integrated position ExEd programs have with the profession and the practices may be key to successfully garnering the high levels of support.
8. Volunteerism in organisations is a way to dissolve boundaries and hierarchies. This may result in advantages to preceptors in terms of accessing management.
9. Forging meaningful relationships with volunteers is important so that goals and motivations can be elucidated.
10. Engagement online may induce volunteering. The National Preceptor Development Program (See Priority #3 Report) would certainly use this modality.

Subsequent to this report, the organisation published strategies for adapting to the findings and changes in the volunteerism strata. (11) The approach they suggest closely mirrors some of the recruitment and retention strategies discussed later in this report. Specifically:

1. Focus on the diverse interests of the volunteer preceptor realising that so long as the core competencies are met, that there can be an individualistic roles in educating. Maybe rather than precepting the person would be interested in other educator or mentor roles.
2. Target individuals for leadership (mentorship, early adopter, promotional appearances)
3. Intentionally ask individuals to see if they would be interested in changing their role/approach to something different/more skilled such as taking multiple students or facilitating a continuing preceptor professional development (CPPD) session.
4. Establishing nation-wide recognition programs
5. Communicate outcomes of preceptors' work back to them via e-mail, newsletters or press releases so they have a sense of accomplishment.
6. Ensure volunteer preceptors are involved in the development of initiatives/change in practice rather than being only responsible for implementation. This facilitates ownership of the initiative.
7. Create roles that volunteer pharmacists would compete to fill. A role that has meaning, status and honour.

The report ends with a memorable quote, "People stay where they're treated well."

Peer Reviewed Literature

Relevant **peer-reviewed** articles were critically appraised for quality (Table 1), analysed for origin (Table 2) and professional sector (Table 3). The average quality of the articles was of medium grade according to the QUEST scoring criteria and by far the greatest number of articles originated from the US with Canada and Australia contributing significantly to the literature. Nursing and Pharmacy contained the greatest number of citations. Medical literature identified only 9 articles of interest.

Table 1: Appraisal Grading	
Grade	Number of Citations
High	20
Medium	20
Low	25
Total	65
Table 2: Country of Origin	
Country	Number of Citations
US	44
Canada	7
Australia	7
UK	2
International	2
Taiwan	1
Germany	1
New Zealand	1
Total	65
Table 3: Professional Origin	
Profession	Number of Citations
Pharmacy	21
Medicine	9
Nursing	27
Physician Assistant	3
Occupational Therapy	1
Interprofessional Health	4
Total	65

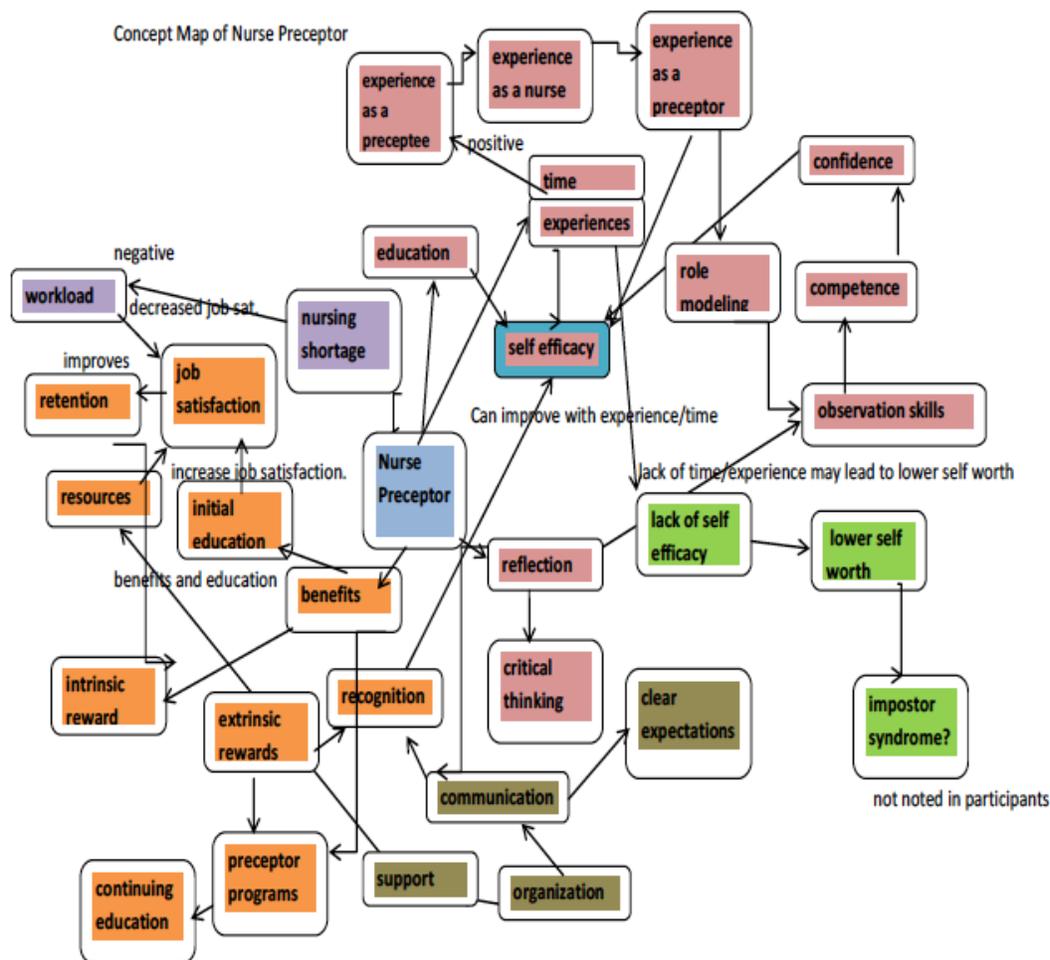
Set against this backdrop of HR management and psychology realms, the peer-reviewed literature pertaining to pharmacy and other health care professions (HCPs) on recruitment and retention provides detailed accounts of the strategies employed by ExEd programs to recruit and retain preceptors as well as research into preceptor's experiences in their role. None of the evidence examined uncovers whether any particular intervention actually results in better results in recruitment or higher rates of retention (significant program outcomes) but instead measure intermediate outcomes such as satisfaction or dissatisfaction. In many cases the research qualitatively describes professionals' state of mind relating to their role as preceptors. Latessa reports that preceptors who report professional dissatisfaction were 3x more likely to indicate they would discontinue precepting in the next 5 years. It may be that attrition is as a result of a sub-par practice in general than the practice of educating in the field. (12)

Separating out themes into separate recruitment and retention sections was difficult. Factors that impact on retention generally also influence recruitment success and vice versa. Within each of these themes, if a particular strategy influences one particular aspect of recruitment or retention it is stated as such.

Included is a section on **barriers** however they tend to be the obverse of the themes for facilitation of recruitment and retention. The barriers are included in a separate section in order to illustrate strong associations between recruitment/retention and preceptor experiences and to raise awareness of their existence or potential. Strategies for avoiding or rectifying the barriers are included within the themes themselves.

The concept map of a nurse preceptor (13) is entirely generalizable to pharmacist preceptors and illustrates how all the roles, benefits, barriers, supports and self-image relate to the preceptor:

FIGURE 2: Concept map of Preceptor

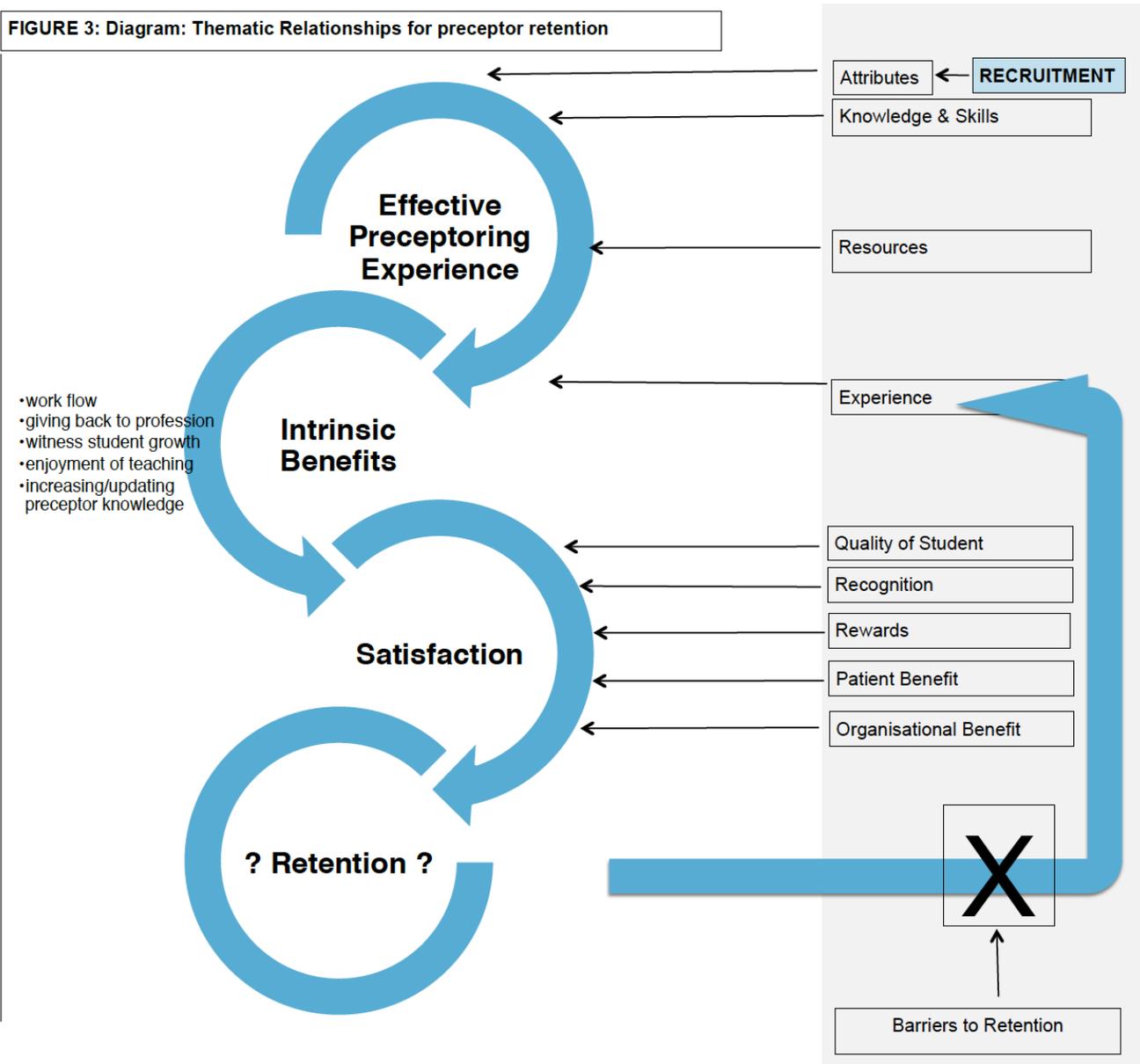


Examining the literature identified 3 major themes associated with retaining preceptors in their role:

1. Effective Preceptoring Experience
2. Intrinsic Benefits
3. Preceptor Satisfaction

Figure 3 below graphically represents how each of these themes may interrelate and eventually impact on retention.

FIGURE 3: Diagram: Thematic Relationships for preceptor retention



THEME 1: Effective Preceptoring Experience

Subthemes

1.1: Attributes/Attitudes

Attributes lending themselves to being an effective preceptor are common to all professional field instructors. These are inherent qualities that individuals arrive with at the threshold of teaching. They are not easily developed through further training or education. The importance of role modeling behaviors to the learning process is unparalleled and in the absence of such attributes, there is real risk of damage to a novice's attitude toward the profession and the ability to focus and learn under such a preceptor (14). The modeling process should be a purposeful activity that demonstrates the knowledge, skills, attitudes, and ethical behaviors that students should acquire. Students need opportunities to observe role models in action and to study the behaviours that constitute their effectiveness. Role modeling is a powerful teaching technique and one especially well suited to the apprenticeship system of instruction in medicine. (15)

Fortunately, most human behaviour is learned observationally through modeling: from observing others one forms an idea of how new behaviours are performed, and on later occasions this coded information serves as a guide for action." - Bandura, 1977

The American Association of Colleges of Pharmacy (AACP) Professional Affairs Committee published a list of attributes from an academic perspective believed as core to preceptors being effective role models for pharmacy students (16). The listing included:

- practice ethically and with compassion for patients
- accept personal responsibility for patient outcomes
- have professional training, experience, and competence commensurate with their position
- utilize clinical and scientific publications in clinical care decision making and evidence-based practice
- have a desire to educate others (patients, care givers, other health care professionals, students, pharmacy residents)
- have an aptitude to facilitate learning
- be able to document and assess student performance
- have a systematic, self-directed approach to their own continuing professional development
- collaborate with other health care professionals as a member of a team
- be committed to their organization, professional societies and the community

Other literature adds to this list of attributes as identified by students (15,17)

- enthusiasm for teaching and the profession
- respect for student
- caring
- friendliness
- desire to help
- acceptance

Within Nursing, preceptors were studied in an effort to gain a sense of what they believed were attributes essential for effective preceptors. A few more attributes were mentioned: (13,18,19)

- sense of honour at being asked to precept
- professionalism
- self-efficacy
- reflective practice
- charisma
- enthusiastic

1.2: Knowledge and Skills

Baseline levels of knowledge within the specific therapeutic or patient care practice and a strong pharmaceutical care (PC) process generally have been developed in a pharmacist ready to take on a preceptor role. There may be a few pharmacists that require some education regarding PC and this is an example of a 'non-educationally focused' learning that could be offered by ExEd Programs. It would be debatable whether the mandate of an ExEd program is to ensure an acceptable level of therapeutic knowledge.

Most certainly there are mandated knowledge and skills related to precepting that must be developed through flexible (timing and delivery modality) offerings by ExEd programs. (13) Please see Priority #3 of the CanExEd Project for a listing of the particular topics that should be included as standardised basic/orientating preceptor education (20,21) prior to the first foray as a preceptor (feedback, formal assessment, expectations etc.) (22) and for regular refreshers and continuing education (intergenerational differences (23), learning styles (21,24)) offerings from the ExEd program. (20,21,25) There is reasonable evidence to suggest that a 40h educational course on precepting resulted in increased job satisfaction (79% of participants), increased their enthusiasm and commitment to nursing (94%) (26) ACPE has developed a list of competencies (16) for preceptors and there is ongoing work within the CanExEd Project to elucidate a set of competencies to inform a National Preceptor Development Program (PDP). A systematic nursing review has called for national preceptor guidelines for education and selection (20) See [Appendix F](#) for a listing of the American pharmacist preceptor Competencies.

The Harris report called for the implementation of a “Master Preceptor” designation to induce higher levels of training for preceptors in the US (16) however it may not have resulted in widespread adoption.

Interestingly, some researchers report a very low rate of preceptor training completion for their preceptors. (6,13,27-29)

One nursing article suggested that job descriptions for all participants in ExEd (Nurse Manager, Staff, Preceptors, Faculty Members, Students) if included in rotation materials could inform participants of the roles each are expected to fulfill. (30)

1.3: Resources

The literature describes a myriad of resources that support preceptors in achieving effective student rotations.

There seems to be a correlation in the commitment to the preceptor role when there is a perception of support for the preceptor. (20) These include:

- rotation syllabi/manuals that include expectations of the student, assessment guidelines and policies
- student quality assurance (QA) feedback on preceptor effectiveness and site educational conduciveness. (19,20,31,32) Hammer provided excellent guidelines for implementing a student evaluation system within a university Faculty of Pharmacy that could be applied to pharmacy preceptors (33)
- Community partnerships based in trust, communication (20,21), training, and reflection between experiential education programs (onsite clinical facilitator or offsite ExEd contact) and preceptors and their organisations have been shown as important for recruitment and retention of preceptors. (19,21,32) This relationship becomes particularly important in scenarios of student failure or difficulty (20) Rodin produced evidence suggesting that faculty reaching out to rotation participants resulted in enhanced student learning and furthered advanced patient care services (34). Clinical facilitator positions are certainly a way of demonstrating commitment to supporting preceptors. An Australian paper provided a narrative of 54 clinical facilitator positions being rolled out across Queensland. The performance indicators that were tracked to establish the effectiveness of these positions related to the preceptor role checklist established for what constituted an excellent preceptor and for the retention rates of new nurses. The design of the study made it difficult to ascertain if the intervention was truly beneficial however there were another 10 facilitators added to the program after the initial implementation. (35) Faculty with the sole role of organizing, planning and implementation of rotations are important resources in ensuring positive experiences for preceptors and other participants in ExEd. (25)
- good relationship with direct supervisor/management and staff colleagues so that support is offered to preceptors while performing in that role (20)
- collaborative relationships at management-ExEd Program level (above preceptors) encourage immediate supervisors to ensure support provided in terms of HR, physical resources, time (20,21) are at the preceptor’s disposal to allow for more effective rotation. Decreasing patient workload has been shown to be related to preceptor satisfaction and commitment (20)
- newsletter containing information about getting/staying involved in ExEd (20)
- peer support group membership builds community. One study in pharmacy using internet conferencing allowed preceptors to learn from and to support each other despite geographic distance. The participants felt that these sessions encouraged them to serve as preceptors regularly. Such encouragement could contribute to the retention of preceptors, which is important to the expansion of experiential learning (13,36,37)

1.4: Experience

Experience in teaching would be expected to contribute to future success in the field of education. (38) In effect, the challenges surmounted lead to an accumulated knowledge. There have been no studies to date that describe or quantify the advantages of precepting experience.

THEME 2: Intrinsic Benefits for Preceptor

Intrinsic motivators appear to be more highly valued than extrinsic ones (12,13) although they should not be ignored. Longitudinal placements seemed to be a source of high satisfaction for preceptors likely due to a confluence of the subthemes below being experienced for a longer span of time. (39-41)

Subthemes:

2.1: Workflow

In medicine, one study suggested there was a turning point at 1-2 months of practice where a student became beneficial to the practice. (42) Students may assist in completion of otherwise incomplete tasks of the day (31) and take initiative to report issues to the supervisor (21)

2.2: Giving Back to the Profession

Producing high-quality graduands and promoting the profession was listed as a source of intrinsic benefits to preceptors (12) in pharmacy (15,34), medicine (39,43-48), nursing (22,27,30,31) and physician assistants (32,38)

2.3 Witness to Student Growth

Through the passing on of knowledge, skills and attitude was described in preceptors within pharmacy, medicine (43,48), nursing (19,22,27,31) and occupational therapy (21)

2.4: Enjoyment of teaching

Was occasionally mentioned as contributing to preceptor benefit in pharmacy (12), medicine (43,45,48), nursing (25) and physician assistants (38) fields

2.5. Preceptor Clinical Knowledge Updated

Thomson's interviews identified the desire to update clinical knowledge as the most frequently mentioned motivation for teaching, and was described as a strategy for GP teachers to preserve clinical competence through the opportunity to learn new aspects of medicine from junior colleagues. (22,31,43) Similar findings have been reported for physician assistant preceptors (38) and occupational therapists (21) and pharmacists (12)

THEME 3: Preceptor Satisfaction

Subthemes:

3.1. Quality of Student

The degree to which the student meets preceptor expectations impacts how much benefit the preceptor experiences. Having 'good students' often ranked high in desire (motivation) to continue to teach (25,32,38,39,49). A nursing article suggests a good student is one with a desire to learn, has knowledge and understanding of practice, can quickly develop their own learning objectives, punctuality, ambition, professionalism, work ethic, respect and courtesy (32,50)

3.2. Recognition

Acknowledgement or recognition of teaching or teaching excellence by ExEd programs may augment the level of satisfaction preceptors experience. (20,44,51) Although the impact of a program to recognize teaching excellence has been debated in the literature, when the program is thoughtfully designed and administered, the benefits may include elevating the status of teaching in the institution; improving faculty morale, job satisfaction and faculty retention; and motivation of faculty members to improve their teaching skills through faculty development programs. A set of 6 recommendations for establishing or revising recognition programs has been developed (52):

- a. use multiple awards
- b. use evidence-based criteria for deciding on recipients
- c. use multiple sources of information
- d. process for awards should be transparent
- e. awards should be well-publicised
- f. awards should be substantial

A 2008 survey of American Pharmacy Faculty awards for preceptors found that 79% of the 64 respondents had an award for teaching excellence in preceptors and that most commonly they were determined by student vote and school committee vote following nominations. (53)

The Harris report called for AACP to take the lead in the US to step forward, share and recognise leadership and commitment to excellence within preceptors at a higher national level. (16)

Pharmacist job descriptions that include precepting/education statements ensure that preceptors are recognised by their employers as taking on a leadership role in their educational efforts in the course of their performance reviews. Career advancements could partially be based on success in precepting role. (30)

Some programs provide token items of appreciation however, even intermediate outcome measures have not been used to describe the benefit of such indications of appreciation. Token items described in the literature include (30,54,55):

- annual recognition celebration

- pins
- certificates
- plaques
- mugs
- pens
- thank-you notes
- lunches

Some jurisdictions and professional regulatory authorities use a credit system for proof of continuing competencies to practice. Counting the preceptorship as a CE credit has rated highly as an inducement or benefit of having a student on rotation. (25)

Inviting preceptors to teach within the Faculty is an honour some preceptors would see as a major acknowledgement of their expertise and skills (19,50). The opportunity to influence student learning objectives through working group contributions also may impact on 'investiture' in ExEd. (21,50)

Bestowing Faculty appointments to preceptors is an important step that confers ownership of teaching to preceptors (19) and may be necessary to gain library access.

3.3. Rewards

Continuing professional development or maintenance of certifications or tuition waivers/rebates were regarded by preceptors as valuable rewards. (30,31,51) Journal subscriptions have been used as well as small reward for precepting (30).

Some preceptors value assistance in manuscript or grant writing (19)

Compensation in the form of remuneration in the literature is generally seen as undesirable in all professions' literature (49,56,57) but possibly becoming more pervasive with increasing competition for rotation spots (12). In discussing the benefits of being a pharmacy preceptor, Beizer comments that although some universities pay preceptors, it's only a token amount (e.g. \$500 per rotation) (41) However, he suggests they might offer free continuing education, allow some tuition credit, or accept the preceptor as an adjunct clinical professor, which may offer research opportunities and prestige. (58) Library and information services have also been offered. (12,59) Pharmacists in one study ranked library access the highest and academic appointments the lowest as incentives for precepting (12).

The medical literature indicated there was evidence to support increased compensation positively impacting recruitment but there was no evidence around retention, and it was not considered within the realm of what motivates the desire to teach (39,60). A Canadian nursing opinion piece indicated that precepting nurses received and extra \$0.65/hour remuneration for hosting students (55). American literature indicate that monetary rewards are rarely used as enticements for preceptors (30)

3.4. Organisational Benefit

Priority #4 report of the CanExEd Project addresses organisational benefit associated with ExEd rotations.

3.5. Patient Benefit

Priority #4 report of the CanExEd Project addresses patient benefit associated with ExEd rotations.

Recruitment

Attributes of successful preceptors are discussed in the previous section. There is no evidence that suggests strict criteria for selecting preceptors results in better outcomes however, there are statements strongly recommending "rigorous selection process that includes indication of desire for participation" (14)

Johansen's dissertation discusses the current approach to recruitment of pharmacy preceptors in the US before going on to survey members within the American ExEd special interest group of AACP. American programs were having difficulty managing to find sufficient volunteer preceptors as well as filling large numbers part-time vacancies for qualified clinical faculty members, who are often counted on to take a significant number of students on core required rotations (especially in acute care and ambulatory care settings). AACP (2009) noted that "maintaining an adequate pool of qualified faculty is a priority issue and its member institutions...47% of vacant positions remained vacant due to the fact that 'there were not enough qualified candidates in the pool'".

Strategies appear to be on a macro (organisational, programmatic) and micro (direct to preceptor promotion) scale. Macroscopic:

1. Attracting pharmacists into academia during their postgraduate **residency training** was disappointing (only 8% went on to faculty positions. The lack of interest brought academics to the conclusion that, "preceptor training, whether through the residency program, a local university, or online program should occur before residents are actively involved in precepting pharmacy students" and perhaps also incorporate teaching certificate programs into the residency curriculum. New practitioners are incredibly challenged by getting

their practice feet under them and seemed unwilling to take a student until they were more comfortable in their clinical role. (34)

2. **Establishing education ‘streams’ for Pharm D students** to encourage them to precept and join academia. (34)
3. Forming **regional cohorts of academic institutions** to standardise the induction (and other components of ExEd) of new preceptors such as the Northwestern consortium where 6 colleges of Pharmacy came together to determine how many positions they would need between them. Danielson concluded a 15% overage in rotation spots contributed to ‘solvency’ of an ExEd Program (61)
4. **Partnering** with large chain pharmacies and medical centres (34)
5. Establishing **paid or co-funded positions** where universities contract with the sites to meet the rotation needs of their students (34). Nursing describes the option of Dedicated Education Units (DEUs) in scenarios where programs are having difficulty securing placements. Essentially, a hospital dedicates one unit to the school and has students rotate through the unit. Seems to attract and retain preceptors and provide excellent QC by faculty. Initial high start-up costs but these are equaled out after the 1st year mainly due to not requiring new preceptors’ orientation. (62)
6. **Recruiting students** since if they’ve had good experiences themselves, they will choose to give back, serving in the capacity of preceptor once they graduate themselves. Furthermore, relationships between student and preceptor engagement with the university need to be nurtured to continue drawing from a pool of interested alumni. (34). There was evidence in recent pharmacy residents (34) and new nurses (14) who accepted students that there was an inordinate amount of stress in their supervising a student early in their practice careers as they were only just getting comfortable with the therapeutics, patients, workflow and care team. The descriptions would suggest that it may be beneficial to delay student assignment to a new practitioner until at least one year of practice had been achieved

Microscopic (34):

Answer Options	All of the time	Most of the time	Rarely	Never	Response Count
Advertisements	0 (0.0%)	3 (2.3%)	32 (24.1%)	98 (73.7%)	133
Word-of-mouth	45 (32.1%)	78 (55.7%)	15 (10.7%)	2 (1.4%)	140
Site Visits	36 (25.7%)	67 (47.9%)	33 (23.6%)	4 (2.9%)	140
Cold Calls	4 (3.3%)	22 (17.9%)	71 (57.7%)	26 (21.1%)	123
Letters to pharmacies in our region	6 (4.8%)	18 (14.3%)	44 (34.9%)	58 (46.0%)	126
Alumni	40 (29.2%)	68 (49.6%)	13 (9.5%)	16 (11.7%)	137
Volunteers who initiate contact with us	37 (27.6%)	69 (51.5%)	24 (17.9%)	4 (3.0%)	134
State boards of pharmacy	1 (0.8%)	11 (8.7%)	44 (34.9%)	70 (55.6%)	126
Chain/retail pharmacy contacts	37 (27.8%)	66 (49.6%)	25 (18.8%)	5 (3.8%)	133
Hospital systems contacts	40 (29.6%)	72 (53.3%)	21 (15.6%)	2 (1.5%)	135
				<i>comments</i>	23
				<i>answered question</i>	159
				<i>skipped question</i>	74

In some cases, professionals don't precept simply because they are unaware of the potential for their participation. Brown, Barner and Shepherd (2004) at The University of Texas at Austin surveyed Community and Migrant Health Centers (C/MHC), which they believed to be an underutilized source of preceptors. Results of the survey indicated that 53.6% of respondents who were not currently affiliated with the college of pharmacy desired to be part of precepting efforts, envisioning student involvement in activities such as "taking patient medication histories, maintaining drug profiles, educating patients and health center staff about medications, evaluating the effectiveness of therapy, participating in clinical research, and participating in health educational programs in the community" (34) Scott similarly reports physicians that do not teach in their offices, report (aside from time constraints) being unaware of the teaching possibilities as barriers to teaching. (63) Ryan concludes in his study, that efforts to recruit should initially focus on promoting awareness of teaching opportunities, as well as offering CME opportunities (64).

BARRIERS

The literature contained a myriad of studies examining the motivations, reasons and perspectives of professionals who precept or have the potential of doing so. In effect if any of the above conditions are not met, they are seen as barriers to engaging in the educational practice. There will always be perceived barriers and as certain ones are surmounted, others take precedence. There are a few barriers to precepting or securing sufficient rotations that consistently manifested in the literature of all health professions (13,34,63-70):

1. Unaware of the option to teach in the field
2. Lack of time/heavy patient load
3. Lack of training/confidence in assessing, providing feedback,
4. Stress of added duty/role overload (unsupportive environment)
5. Role conflict (preceptor not included in job description/job reviews)
6. Unprepared or difficult students
7. Expansion of class size and programs resulting in competition between programs

These barriers would be addressed through the implementation of strategies identified within the three themes identified within the literature:

- Effective Precepting Experience
- Intrinsic Benefits
- Preceptor Satisfaction

There is an important subset of barriers beyond the control of educational organisations that result in attrition of preceptors or in pharmacists never becoming preceptors. These external influences include: organisational priorities, restructuring, governmental demands as well as personal circumstances like health and family commitments. These influences can trump all else even when the factors have aligned to lead to satisfaction and retention.

Grey

UBC's AGILE Project produced a poster describing the results of a mixed methods approach regarding hospital preceptor experiences with their role and made recommendations to optimise these experiences. The findings were in keeping with other literature above in addition to **lack of space for teaching and learning**. See Appendix E or the AGILE website for the poster.

In addition, the group has described an 'Innovative Practice Educator Rewards and Recognition Program' that includes some of the strategies identified earlier in the report. See Appendix E for this poster.

Also, the AGILE project has published some findings that provide pharmacy preceptor-specific detail within the Subtheme (3.1 above) of 'Quality Student' from a mixed-methods investigation (available at:

http://www.aacp.org/meetingsandevents/AM/2015/Documents/abstracts/ResearchEdu/ExperientialEdu/Opportunities_to_Enhance_Institutional_Experiential_Edu-MutuallyBeneficialActivities_Analysis.pdf) They surveyed 124 front line pharmacy preceptors, coordinators, residents and recent graduates in BC to understand what specific student-performed activities would be subjectively viewed as mutually beneficial. Mutually beneficial activities (Table 7) were considered to be tasks that were:

1. Beneficial to student learning
2. Beneficial to patient care and site
3. Learners were prepared for
4. Preceptors were comfortable with

'Hospital Pharmacy in Canada 2013/14' reports that of 145 frontline preceptors in Canadian hospitals, 23 (16%) were preceptors for undergraduate students and that 89 (61%) viewed students as an asset in the delivery of pharmacy services. Graduate students were more frequently (78%) viewed as an asset to providing patient care due to greater maturity levels and experience. (71) Whether these figures are sufficiently high to incite retention is unknown.

The survey identified 14 enablers to accommodate additional undergraduate students. The two highest-ranked facilitators were:

1. Bestowal of academic appointments was rated by 51% of respondents as very/extremely helpful. This may be surprising as CCAPP standards 2012 state in standard 31.2: Preceptors and other clinical faculty employed by the experiential sites should be offered or be eligible for an appropriate academic appointment to recognize their critical role in the education of students.(1)
2. Resourcing in the form of faculties sending rotation/clinical facilitators to the sites on a regular basis and having a dedicated faculty member to help with precepting were highly ranked on the survey. The reports echo findings in the peer-reviewed literature.

Other facilitators included preceptor development (#3 on the list-another type or resource). Finally, the inclusion of a listing within the syllabus of the direct patient care activities that students can do with minimal supervision at each educational stage was ranked #4 on the list of enablers.

Table D-14. Enablers to Accommodate Additional SPEP Students, 2013/14

	(n=)	not helpful	somewhat helpful	very helpful	extremely helpful
(a) New or expanded preceptor training programs	(148)	31 21%	47 32%	57 39%	13 9%
(b) More flexibility in timing or scheduling of rotations	(147)	24 16%	76 52%	37 25%	10 7%
(c) Adequate space and equipment to facilitate experiential education	(148)	69 47%	49 33%	21 14%	9 6%
(d) Simplified evaluation forms and processes	(146)	51 35%	67 46%	24 16%	4 3%
(e) Better prepared students	(147)	55 37%	64 44%	25 17%	3 2%
(f) Academic appointments for preceptors	(147)	22 15%	50 34%	53 36%	22 15%
(g) Rotation coordinators / supervisors from the faculties /colleges regularly present at your facility	(146)	18 12%	50 34%	57 39%	21 14%
(h) Dedicated university / technical college faculty assisting with precepting students	(147)	45 31%	50 34%	30 20%	22 15%
(i) Funding to provide backfill for preceptors who are providing experiential education	(147)	98 67%	31 21%	16 11%	2 1%
(j) No pharmacist or technician vacancies in areas where students are being precepted	(149)	82 55%	47 32%	17 11%	3 2%
(k) Students assigned to your hospital spending the first week together as a group and learn standardized process skills	(146)	40 27%	71 49%	27 18%	8 5%
(l) Students in the experiential training component of their pharmacy program attending most of their experiential rotations at your hospital	(145)	34 23%	58 40%	48 33%	5 3%
(m) Availability of a list of patient care activities which pharmacy students could carry out with minimal supervision at different stages of their education	(147)	29 20%	63 43%	48 33%	7 5%
(n) Students being active participants in the delivery of essential patient care services at your hospital	(145)	28 19%	68 47%	28 19%	21 14%

Base: Respondents providing SPEP training

The 2009/10 report had slightly different enablers than 2013/14. It called for better-prepared students, simplified assessments and access to electronic journals. (72)

The 2011 CSHP report, "Education: Information Paper on Collaborative Development, Delivery and Evaluation of Pharmacy Curricula" provided a voice to hospital managers on the topic of ExEd within their institutions. (73) Managers expressed support as well as raised some challenges to providing ExEd in hospitals. Whether these findings are still applicable is debatable (communication with author and CSHP membership). Below are two slides used in a presentation to CSHP in 2015 that summarise key findings of the report. As the recommendations of the CanExEd report are implemented and Faculties implement augmented(ELPD) curricula, it is anticipated that many of these challenges will be or have been addressed.

Education: Info Paper on Collaborative Development, Delivery and Evaluation of Pharmacy Curricula

ExEd is provided at hospitals:

1. Recruitment of future employees
2. Role in training future pharmacists
3. Expands scope of service
4. Consistent with educational mission of the region/site
5. Addresses gap in practice readiness of new grads

ExEd is not provided at hospitals:

1. No staff to coordinate
2. Lack of funding to provide rotations
3. Limited pharmacists available to shortage or lack of time
4. Lack of trained or prepared pharmacists
5. Rotation schedules not conducive to my organisation

Education: Information Paper on Collaborative Development, Delivery, and Evaluation of Pharmacy Curricula

Published by the Canadian Society of Hospital Pharmacists (CSHP), Ottawa, Ontario. 2011 edition. Use of this document was approved by CSHP Council in 2011.

Suggested citation:

Canadian Society of Hospital Pharmacists. Education: information paper on collaborative development, delivery, and evaluation of pharmacy curricula. Ottawa (ON): Canadian Society of Hospital Pharmacists; 2011.

1

Education: Info Paper on Collaborative Development, Delivery and Evaluation of Pharmacy Curricula

Top 5 concerns:

- Entry-level PharmD program putting increased workload expectations on staff
- Lack of funding to provide experiential training
- Lack of availability of pharmacist practitioners (e.g. pharmacist shortage, lack of pharmacists' time)
- Competing demands for training (e.g., demands for resident v. PharmD v. undergraduate student v. pharmacy technician student training)
- Lack of space and equipment

Education: Information Paper on Collaborative Development, Delivery, and Evaluation of Pharmacy Curricula

Published by the Canadian Society of Hospital Pharmacists (CSHP), Ottawa, Ontario. 2011 edition. Use of this document was approved by CSHP Council in 2011.

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11

PEP-C survey

Establishing the turnover rate may inform ExEd programs of the effectiveness of their retention efforts and allow informed decisions regarding the recruitment efforts over time. If the percentage turnover remains stable over 3-5 years and at a point, the figures increase or decrease, it may be that a particular intervention/change caused this rate to vary. Variances between programs may be indicative of a particularly effective or a notably detrimental practice that impacts retention rates.

PEP-C Members were polled on their current stance on requirements for practice experience in order to be onboarded as a preceptor. Of the eight respondents,

- 2 (75%) believed different year/level of rotations (early, intermediate, advanced) require different amounts of preceptor experience. 6 (75%) responded there would be no difference.

- When asked if there was a reasonable number of years experience that should be common to all rotations across Canada, 7 (88%) responded affirmatively. Of those seven, 5 believed 1 year was reasonable, 1 indicated 2 years and 1 indicated they would defer to whatever the PRA's law stated.

Stakeholder feedback on Draft of this Report:

- The figure of 61% of hospital preceptors seeing students as an asset (71) may be reflective of the degree of supervision preceptors interpret students to require. CSHP's representative on the Steering Committee advocates for detailed preceptor development on the front of effective and required levels of supervision for each educational level of student so that student benefits can be maximised safely. Where preceptors find workload associated with student presence to be overt, it may be that student activities are receiving more oversight than is necessary. This shift may require liaising with PRAs in order to gain consensus on regulation terminology and rotation syllabus interpretation. Students must be perceived as an actual benefit rather than a perceived risk.
- The Faculty-required student assessment and work documentation associated with rotations should be carefully considered so that students receive the support and feedback required to optimise learning and preceptors can complete each formal midpoint and final performance assessment within approximately 30 minutes
- High levels of support are required for preceptors involved in teaching students who are not meeting educational expectations. The presence on-site of a faculty member who can assist a preceptor with issue identification, remediation strategies, documentation and emotional support is extremely important for retention of the preceptor and positive student outcome.
- Subsequent to the 2014 interviews, U of A's ExEd office developed a recruitment strategy for the ELPD. It may inform upcoming prototype.

E. Discussion

1. Interpretation

The facilitators and challenges for recruiting and retaining preceptors are generally similar between nursing and pharmacy realms. Medicine does not seem to have the same degree of concern perhaps because historically, undergraduate placements, post-grad residencies, and fellowships have been well established as necessary for the running of practices and institutions. While they would be faced with similar challenges regarding QA of preceptors, their recruitment and retention component does not seem to be an ongoing struggle. Physicians expect and want students in their midst.

Recruitment has two basic considerations: 1. Finding sufficient quantity of preceptors and 2. Ensuring those preceptors are quality preceptors. As such, there is a tension between wholesale inductions of pharmacists as preceptors versus screening them for basic attributes that lend themselves to the role. Canadian Pharmacy ExEd programs will have to consider carefully their strategies for ensuring balance between these two conditions. Retention strategies have been well described in the literature. It is difficult to say with certainty which strategies are the most effective as retention rates are not reported in the literature. The intermediate endpoints of preceptor satisfaction would suggest that intrinsic rewards inherent in the altruistic pursuit of knowledge and teaching outweigh the extrinsic benefits of monetary rewards or tokens of appreciation.

Finally, the current reality of most Canadian Faculties facing a sharp upswing in the need for preceptors in the near horizon means that ExEd programs will need to consider strategies to meet their demands. For some that strategy may be to welcome all potential preceptors meeting the baseline criteria with a longer-term strategy of developing these exemplary preceptors.

Recruitment and retention facilitators and benefits will change as the practice landscape changes, generational shifts occur and funding or support for clinicians wax and wane. What is true now may not hold in the medium future.

Programs will reach equilibrium where the high rate of onboarding preceptors slows. At that point, recruitment efforts should decline so long as effective retention strategies exist to ensure these volunteers maintain participation.

2. Recommendations

The following list adapted some of Johansen's dissertation (34) recommendations and included those garnered from PEP-C interviews and literature review.

A. RECRUITMENT

1. **Maintain relationships with alumni** through liaising with them directly or through the alumni relations office at the Faculty since it's much easier to recruit from a body of pharmacists already affiliated with the institution than unknown preceptors.
2. **Network with professional organizations** on local, provincial and national levels. Establishing and maintaining these relationships provides a meaningful conduit for macroscopic recruitment and retention efforts not to mention strengthening of the ExEd 'product'. Speaking at their conferences, meetings and using their communications conduits are efficient, effective ways of providing and collecting valuable information. Forming strategic advisory committees of local decision-makers facilitates preceptor identification and engagement within each of their staff membership
3. **View and engage students as future preceptors** translates into raising the concept with students that they too will be expected to teach learners in the field. The point of readiness to precept is variable depending on the practitioner but 1-2 years of experience has been identified in Canada as being the optimal time for a pharmacist to begin in a precepting role. Some ELPD programs have offered aspects of preceptor development to final year students as a way to prepare them for peer learning opportunities and for future preceptor roles.
4. **Evaluating current needs and plan for future growth** is extremely important given this is a time of immense change in the supply and demand of preceptors with the ELPD transition across the country. A formal short-term (1-3 year, depending on the university Faculty) recruitment plan along with a long-term maintenance plan that changes gears once the need for preceptors levels out are needed.
5. **Consider reengaging with former preceptors.** They may have had reasons for not continuing in their role that could be surmounted. These are individuals with valued educator experience

A. RETENTION

Effective Preceptoring Experience

6. **Include in the syllabus a statement of patient care duties students should be able to independently complete** at each stage of their rotations (early/intermediate/advanced rotations). Preceptors will want to confirm early on in the rotation that indeed students are competent at these tasks before allowing greater student autonomy on these functions. Careful monitoring of preceptor and student perceptions of ability is necessary for the first few years of a new program to ensure the syllabus statements in fact are accurate.
7. Facilitate collegial support by offering training **sessions to support staff** within rotation sites so that technicians, assistants, administrative staff understand what the preceptor and student goals and expectations are and how they can contribute to a positive learning experience for the student and a supportive environment for their preceptor colleague. See Priority #6 report for further detail on this recommendation.
8. **Provide on-going support to preceptors.** Given that preceptors support over thirty percent of the curricular load, they merit high degrees of resourcing from Faculties and employing organisations. ExEd faculty should make an effort to know their preceptors and their motivations so that they feel heard and valued. Preceptors need **accommodation and allowances** in workload to allow them to be effective educators (and prevent burning out in the role). ExEd offices should open up discussion with supervisors and organisations about reasonable workload reductions. **Regular communication** regarding outcomes and accomplishments in the form of email, phone calls, visits and newsletters indicates respect and appreciation for their work. Implementing **advisors/educational facilitators** is an effective way of supporting preceptors and the uptake of best ExEd/teaching practices that has been implemented in some practice environments and should be considered where high student concentrations merit the investment. It is also a way of forming groups of educators.
9. **Create a standardized (national with unique program-specific components) orientation for new preceptors and ongoing continual development for experienced preceptors.** Priority #3 of the CanExEd Project instructs on the details of a National Preceptor Development Program (PDP). The PDP will ensure CPPD is flexible in medium, mode and timing so that preceptors can access it at will, through a medium conducive to their learning style and conveyed for immediate practical application to their teaching and learning efforts. Learning is facilitated by interaction with peers (learning communities) so the PDP should include networking opportunities (face to face or electronic) to exchange ideas with one another.
10. **Standardize assessments based upon competencies** for all of pharmacy programs. This streamlines the process for them and helps preceptors who may be supporting multiple schools or programs. Priority #1 in the CanExEd Project provides guidance on this front.
11. **Create a National advisory board of preceptors** from a variety of practice settings to help shape changes to the experiential component of the curriculum (including preceptor development). This may exist in each jurisdiction but a board may be advisable to maintain standards Nationally.

Preceptor Satisfaction

12. **Acknowledge preceptors for their efforts with special designations** and awards for their accomplishments. Rather than simply being acknowledged at the university or program level, if preceptors could be acknowledged with a **national award and national designations**, it brings cohesiveness across the country.
13. **Partner with other pharmacy** education programs (ExEd, residency programs, regulatory agencies) preceptors and students to offer joint trainings and the utilization of similar assessment rubrics and rotation management technology. By not dividing loyalties between programs, everyone benefits.
14. **Invite and involve preceptors in teaching and admissions interviews**, etc. so they feel vested and valued in the program from start to finish.
15. **Recognise preceptors** according to the programs means and preceptors' desires through rewards and recognition. A range of actions could be used. Maximally, a national preceptor of the year award and minimally, a note of thanks would be appropriate. Faculties must offer academic appointments to preceptors according to CCAPP standards. ExEd faculty should ensure the promotion and communication this opportunity to preceptors as it appears they (or their managers) are not aware that this is the case (personal communication from national CSHP issues day to PM)
16. **Consider the changes in the community, country, and world** as a whole and contribute to meeting the needs of an aging population, depressed economy, and/or growing healthcare costs. Publicise impacts so that preceptors are excited, engaged and proud of their association with academia.
17. **Make precepting count toward CPD requirements**. Continuing education credits, Continuing Professional Development (CPD) and/or competency evaluations (depending on the jurisdiction PRA) are necessary for license renewal. Achieving reflection and professional development in the sphere of teaching and learning fits within all renewal processes and should be promoted to pharmacists as a valid and important part of their CPD. In addition, the act of hosting a student can be considered a separate piece of professional development and as such be recognized by the PRA as CE units or professional development.

C. CONTINUOUS QUALITY IMPROVEMENT (CQI)

1. **Institute a continuous quality improvement (CQI) program for ExEd**. Nationally: Recruitment/selection criteria should be evidence-based and standardised across the country to ensure baseline qualities of new recruits are present. Feedback trends from preceptors, students, alumni, and stakeholders should be studied, shared and acted on. Continuously plan and evaluate efforts in the areas of recruitment, preceptor effectiveness, intrinsic benefits satisfaction and retention. Consider a live national register of preceptors so that a system could be implemented (23,74) that indicates to preceptors and ExEd faculty when a preceptor is in good standing, approaching a deadline for further CPPD or is no longer eligible to host a student. See Appendix G for a schematic of QI including a preceptor satisfaction component. The "Hospital Pharmacy in Canada" Reports should be monitored annually to identify changes in the rate of pharmacists who believe pharmacy students are beneficial to their practice. Jurisdictionally: Conduct initial mutually-beneficial activity (MBA from Agile Project) and base subsequent annual additional (to the National items) QI evaluation on findings
2. **Create a report card system for ExEd Programs to benchmark against**. Organizations like AFPC should be resourced so that a national CQI plan can be carried out.

D. RESOURCING: ExEd Programs require sufficient skilled staffing and funding to implement these strategies

3. Prototypes

1. Recruitment strategy: schedule and content informed by recommendation and University of Alberta's formal plan.
2. Retention strategies: Organisational and preceptor level.
3. Preceptor role section for insertion into employers' job descriptions
4. Student evaluation of preceptor QA survey items (See Priority #6 for detailed surveys)
5. Communication tools/content for recruitment (annual notice to residents, alumni, desirable former preceptors, conference booth materials, presentation slides to provincial chapters)
6. Communication tools/content for retention (quarterly newsletter headings, e-mail invitations to participate in labs, admissions interviews)
7. Student ability guides/readiness to practice statements (Priority #1)

8. Informational session content (online and in person and print) for non-preceptor staff at sites (Priority #6)
9. Job description for academic clinical facilitator (UBC may have a version)
10. Presentation content to managers/organisations re: supports (such as protected time) for precepting and staff education/information. To fit within the larger vision of community education units.
11. Terms of reference for a national and jurisdictional boards of preceptors/education coordinators
12. National preceptor of the year award sponsorship and criteria and promotion thereof
13. Develop written process for outreach initiatives (include outcome measurement for communications purposes) to underserved populations through preceptor training.
14. Draft sections for PRAs to include in their guidelines for CPD that includes educationally-focused learning gaps, plans and evaluation of achievement of the plans.

The following chart provides an overview of the steps and timeline to achieve the implementation and sustain the model. The chart works on the premise that the program is aiming to begin preparing for the increased demands of the Pharm D ExEd curriculum in terms of numbers of preceptors.

Table 5: Timeline of Steps for Recruitment and Retention Prototypes (to be developed)

Date	Step	Description	Notes
January, 2016	Regroup	Form Priority #5 Working Group (WG) to develop orchestrated short and long-term recruitment and retention prototypes. Review this timeline. Prototypes required for: CQI: reporting forms, collation reporting Administrative support: responsibility for collecting and reporting annually Recruitment: Develop Retention: Liaise with Priority #3 WG to follow up on status of National PDP.	

4. Quality outcome measurement

The table below provides a selection of indicators and measurement tools that may be utilised for this Prototype (and possibly others) during piloting and larger scale implementation stages. Once selected, changes to the tools should only occur after careful deliberation as changes weaken the ability to compare over multiple years and between multiple programs. Further research and engagement of experts regarding best practice for program evaluation of ExEd is imminently required.

Table 2: Short-Term Performance Indicators for ExEd (75)

Indicator	Measurement Tool	Possible Item Applicable to this Priority	Focus
Satisfaction of Preceptors	Annual survey to preceptors includes standard items Biannual Preceptor Focus Groups	1. Would you volunteer to be a preceptor again in the next academic cycle? If not, why? 2. Would you recommend participating as a preceptor to your colleagues? If not, why?	Preceptor
Student satisfaction with preceptor. This feedback increases effectiveness of the preceptor and results in intrinsic benefits to the preceptor	End of rotation learner evaluation of ExEd Program, preceptor teaching and site conduciveness to learning	My preceptor was: <ul style="list-style-type: none"> ▪ Interested in my professional development ▪ Was a role model ▪ Prepared for the role of preceptor ▪ Responsible ▪ Collaborative in approach ▪ Committed to role of practitioner and educator in the field 	Learner OEE Preceptor
Number of preceptors recruited	Annual rate of recruitment	# new preceptors/total number in previous academic year	OEE and preceptor
Number of preceptors lost	Annual rate of attrition	# of preceptors not offering rotations for the last 2 academic years/annual average total	OEE And

number of preceptors

Preceptor

Table 3: Long-Term Performance Indicators for ExEd

Indicator	Measurement Tool	Possible Item	Focus
Recruitment and Retention	Ten-year recruitment and retention trends	Graphical representation of local ExEd transposed against national averages	OEE

F. Conclusion

Pre-ELPD Canadian Pharmacy ExEd programs have managed to date with generally ad hoc approaches to recruitment and retention however there is recognition that a more organised, consistent approach is required as the ELPD horizon nears.

ExEd programs are managing their preceptor supply and demand using targeted, unstructured, macro and microscopic approaches. Whether solvency coverage of 15% is attained or targeted by programs is unknown at time of writing. A national approach for recruitment and retention would benefit ExEd programs in terms of workload, maximizing benefits to participants and measuring actual outcomes. Although recruitment and retention figure highly on ExEd faculties' operational considerations, none could easily quantify the numbers lost and needed on an annual basis.

The literature provides instruction on how to pursue short and longer term plans for recruitment and retention on a jurisdictional and national scale. Design of research made discernment of best recruitment and retention practice impossible, as different strategies could not be compared. Any concerted effort on the part of Canadian ExEd members on this front should be carefully studied and reported for the benefit of all programs. The literature does provide some prioritization as expressed by preceptors on what they see as major vs. minor considerations in making decisions to join the ExEd cadre and/or continue in their preceptor roles. It would seem that a recruitment campaign focused on the desired attributes of a preceptor and expectations of the Faculty and students might be the most obvious way to start. Subsequent screening will ensure that any warning flags are identified that would preclude the rare unsuited pharmacist from receiving students on rotation.

Once in the academy, preceptors need continuing professional development in the area of teaching and learning, support and interaction with other preceptors, support from colleagues and supervisors, be made to feel appreciated and necessary and that they're fulfilling their desire to give back and make a difference in their students and professions' development. Extrinsic rewards although secondary, should be employed selectively and efficiently. Regular monitoring of how preceptors are experiencing their role in teaching should be undertaken and strategies adjusted to ensure appropriate responses to any issues can be addressed. The most recent experience with teaching is likely the one that the preceptor will remember and base subsequent participation decisions. Target retention rates may assist ExEd programs in ensuring their strategies are effective and minimize the recruitment efforts required on an annual basis. A short and longer-term plan will be beneficial as the 5 remaining faculties move through their upswing in supply challenges to a new plateau of constant demand.

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