



Canadian Midwifery Regulators Consortium
Consortium canadien des ordres de sages-femmes

*National Midwifery Assessment Strategy:
Multi-jurisdictional Midwifery Bridging Project*

Research Phase: Needs Assessment Report

Prepared by Wendy Martin Consulting
For the Canadian Midwifery Regulators Consortium
April 2007

Acknowledgments

Joanne Daviau, RM, provided expert consultation and advice regarding the analysis of competency gap data.

Production of this document has been made possible through a financial contribution from Health Canada, in collaboration with the Western and Northern Health Human Resources Planning Forum and its member jurisdictions, as well as by in-kind and other support from the members of the Canadian Midwifery Regulators Consortium (College of Midwives of BC, Alberta Midwifery Health Disciplines Committee, College of Midwives of Manitoba, College of Midwives of Ontario, Ordre de sages-femmes du Quebec, and Northwest Territories Health Professional Licensing - Midwifery).

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1. INTRODUCTION

1.1 Project context

The Canadian Midwifery Regulators Consortium (CMRC) is the network of regulatory organizations in the six provinces and territories where midwifery is currently regulated.

Since 2003, the CMRC has been actively working towards more effectively integrating internationally-educated midwives¹ (IEMs) into Canadian midwifery². The National Midwifery Assessment Strategy (NAS) project, from 2003 to 2006, carried out extensive research to determine the key issues and solutions. This review of stakeholder opinions and external trends resulted in a number of recommendations for the development of key assessment tools. Some of these, such as the Canadian Midwifery Registration Examination, were able to be almost fully developed within the NAS project. Others, such as the important recommendation to expand access to bridging training for IEMs, were too large to be able to be fully addressed within the NAS project. However, the NAS project did afford the opportunity for consultation with stakeholders and the development of the Conceptual Framework for a Canadian Bridging Program.

In the Fall of 2006, funding was secured from the Western and Northern Health Human Resources Planning Forum for a Midwifery Bridging Project – Research Phase. This six month project was designed to gather the information needed to inform a comprehensive plan for implementing a multi-jurisdictional midwifery bridging program that will provide access to geographically dispersed IEMs.

Three key tasks are included:

¹ Internationally-educated midwives includes all midwives who have been educated as midwives outside of Canada and who are not already registered as a midwife in a Canadian province or territory.

² The NAS Research Plan, available at www.cmrc-ccosf.ca/node/6 provides the background and reasoning behind this identified need to more effectively integrate IEMs.

- 1) Best Practices Review – a review of current bridging programs and their challenges and successes in order to learn from others experiences;
- 2) Environmental Scan – a scan of specific courses and workshops already in existence that may be able to be adapted or used “as is” in a multi-jurisdictional midwifery bridging program;
- 3) Needs Assessment – an analysis of data from midwifery regulatory authorities in Canada to determine the key gaps that must be addressed in a Canadian midwifery bridging program.

1.1.1 Goal of Needs Assessment

Midwifery regulators in Canada have been assessing internationally-educated midwives in Prior Learning and Experience Assessment (PLEA) processes since 1995 when Ontario launched the first one. During this time, regulators have systematically identified gaps in competencies vis-à-vis provincial competency statements on a per applicant basis. Through these processes, they developed a general understanding of the key weak areas that need to be addressed by most IEMs applying to their provinces. However, there have been little empirical analyses of gaps and there has been no analysis of the common gaps identified across provinces.

The goal of this needs assessment was to obtain and analyse data from each regulator in order to have a stronger understanding of both gaps identified on a per province basis and, most importantly, on the key gaps identified across provinces. This data analysis was to then inform the development of a multi-jurisdictional bridging process by ensuring that the courses/workshops included are designed to address the appropriate gaps in competencies.

1.2 Methodology

1.2.1 Data Collection

Each regulatory authority that has carried out an assessment process³ was asked to forward data on the gaps identified in their processes over the most recent 5 years. In BC, Alberta, Manitoba, and Ontario, this was data from PLEA processes. In the case of Ontario, which in 2001 switched from PLEA to a bridging program offered by Ryerson School of Continuing Education, the majority of the information provided was related to gaps identified by the latter program.

In preparing data to be forwarded, regulators were asked to review their actual records and record the most common competency gaps, including gaps related to communication and ability to work within the Canadian midwifery and health care systems and gaps in specific midwifery knowledge, skills, or aptitudes. These gaps may have been identified at any stage of the assessment processes including portfolio assessment, exams, or supervised practice. This information was to be submitted in a summary report format (with no identifying information) to the researchers.

In practice, there were severe limitations on the amount of data available due mainly to lack of staff time within the regulatory authorities both now and in the past for data collection, organisation, and analysis. Alberta was unable to provide much information at all, only a few assessment reports and a small amount of information on candidate profiles. Quebec provided a brief summary of weak areas and generalised candidate statistics, identified via an analysis of some, but not all, assessment records. BC and Manitoba provided final assessment reports, with identifiers removed, for each PLEA candidate; these 125+ reports identified candidates' weak areas and gaps that were required to be filled in supervised practice. The bridging program in Ontario provided a

³ Northwest Territories does not have an assessment process in place and therefore had no data to forward.

summary of gaps based on statistical records from throughout the program's history. BC, Manitoba, Ontario, and Quebec also provided varying amounts of statistical information to provide context and a general understanding of trends and issues in the assessment/bridging processes to date. This was supplemented by data collected during the NAS project.

1.2.1a Limitations of Data Collection

Midwifery is a relatively small profession and the numbers of IEMs who have entered assessment processes in the last five years is small enough that statistical significance cannot be ascertained from a statistical analysis alone. In addition, the quantity and quality of data gathered from each province varied due to varying abilities to maintain statistics related to assessment processes. Inconsistencies in data gathering approaches, such as the difference in names of gap categories identified, made interprovincial analysis very challenging.

With the exception of data from Ontario, the data gathered came from the results of assessment processes designed, like all assessments, to sample competencies rather than test each one. This inevitably means that our analysis cannot be considered comprehensive in nature. It is possible, that if exams tested different competencies or used different sample scenarios, the results could have been different. Furthermore, little information was available from candidates or otherwise regarding why they did poorly in certain areas, leaving the researchers to interpret the information that was available based on their past experience. Fortunately, the researchers did have past involvement in assessments in BC and were able to use this experience to inform their analysis.

Regulators are aware that some IEMs self-assess themselves as not meeting Canadian standards and therefore do not apply to be assessed. Unfortunately, there is no information available from these IEMs regarding the specific gaps that led them to their conclusion. The lack of such information is a major weakness in this analysis as it is possible that a bridging program could address some of

these gaps, providing access to registration for a greater number of IEMs. It is recommended that further research and analysis be carried out in this area.

1.2.2 Data Analysis

The data analysis goal, as noted above, was to analyse the similarities and differences between the competency gaps noted by each regulator, ultimately identifying the key topics that need to be covered in a multi-jurisdictional bridging program. This involved a number of steps, as outlined below.

1.2.2a Analysing Context Issues

Regulators provided the researchers with background information regarding the IEMs who took part in the various assessment processes. In the absence of systematic data collection systems, it was necessary to create a template for data input and analysis. This was done using Excel.

1.2.2b Canadian Competencies for Midwives

The *Canadian Competencies for Midwives*, which outlines the knowledge and skills expected of an entry-level midwife⁴ in Canada, provided the basis for this analysis. There is a high degree of similarity in the entry-level competencies required by the various Canadian jurisdictions regulating midwifery. There are, however, some additional competency requirements in specific provinces and territories which may need to be taken into consideration in the development of province/territorial specific components of a bridging program.

1.2.2c Analysing Provincial Assessment Reports

Prior to being able to commence the interprovincial analysis, the individual assessment records from BC and Manitoba needed to be analysed (102 and 29 respectively). Excel spreadsheets were used in the coding process to record all

⁴ Entry level midwives are those who have been assessed as eligible to start practising in Canada, after they meet provincial/territorial requirements, in the full scope of practice and without supervision requirements on their registration.

gaps identified. A process of ranking emerged based on how often each gap was identified in a given record (1 point per time). After initial coding, categories were linked to competencies from the *Canadian Competencies for Midwives* and then grouped as appropriate. For example, “assessment of the newborn head” and “assessment of the newborn extremities” were both linked to competency IV B1 : “perform a complete physical examination of the newborn”, and placed in the “Care of the Newborn and Young Infant – Newborn Assessment” gap area. This allowed the ranking system to identify priority areas more clearly.

When a gap could rightly be attributed to a lack of knowledge or ability in several competency areas, the researchers placed it in what appeared to be the most significant competency area.

Additional information was sought by email from the regulatory authorities when needed to better understand the gaps in question and the candidate profiles.

1.2.2d Making Comparisons Interprovincially

As noted earlier, more detailed data was available from BC and Manitoba than from other provinces, where summaries of analyses were provided. BC data was based on larger numbers of applicants than the Manitoba data, and Manitoba data had some deficiencies due to recent staff turn-over and less detailed assessment reports. Due to this situation, the analysis of data on an interprovincial basis was carried out by starting with BC data and then reviewing other province’s data or analyses to identify if there were any inconsistencies between provinces. This was followed by a final review to detect gaps identified in other provinces but not in BC.

Due to the presentation of data in this way, BC data provided is very prominent. Readers should be aware that it is possible a few of the gaps identified in BC may be in areas that are province-specific and that may not appear on a pan-Canadian bridging curriculum (e.g. epidurals are not managed in Quebec).

1.2.2e Limitations of Data Analysis

A major limitation in this process was that the analyses from Quebec and Ontario did not result from the same process as that from BC, Manitoba, and Alberta. Categories were not consistent. This, and the fact that there are fairly large discrepancies in numbers of applicants in each province, presented difficulties in determining the impact of any differences identified by the researchers. It is possible that additional gap categories would have been identified in those provinces had the same system been used or had there been larger numbers of candidates.

Other limitations were the almost total lack of data from Alberta and overall numbers so small in most provinces as to make the results of quantitative analysis of limited statistical value.

Finally, it was not always evident what the exact competency issue was when gaps were identified on assessment reports. For example, what is the competency definition of “midwifery approach”? What is “woman-centred communication”? Why was “GBS” (group B Strep) identified? Was knowledge lacking on the subject itself or on BC standards related to GBS, or was the issue more related to the way the candidate communicated the information to her client (actor) in an OSCE? Interpretation and grouping of these items was facilitated by the fact that the researchers had been involved in the assessment of PLEA candidates; however, it is clear that there could be multiple or varying competency issues under many of the gap statement headings.

2. FINDINGS

2.1 Candidate Profile & Barriers

Midwifery was first regulated in Ontario in 1994 and it has now expanded to BC, Alberta, Manitoba, Quebec, and Northwest Territories. As midwifery was regulated in each province, processes to assess and register midwives who were practising before regulation were carried out. Both Canadian-trained and internationally-educated midwives were registered in these “grandmothering” processes. After these initial processes, each province has put in place Prior Learning and Experience Assessment (PLEA) or equivalent processes to assess the competencies of internationally-educated midwives who wish to work in these provinces. In 2002, Ontario replaced its PLEA with the International Midwifery Pre-registration Program (IMPP), a midwifery bridging program. This report and analysis is restricted to these current PLEA processes and the IMPP, from their commencement to January 2007.

The results of the analysis of candidate information must be looked at critically given the small numbers involved, but it still provides some interesting potential trends related to personal characteristics of the IEMs involved. This data is provided below by province/territory and via a pan-Canadian summary.

2.1.1 British Columbia

The College of Midwives of BC’s Prior Learning and Experience Assessment (PLEA) process during the period analysed, included an in-depth portfolio assessment involving review of educational and clinical experience documentation and proof of English language fluency. Successful candidates then took part in written and clinical OSCE examinations covering both general competency and emergency skills. An Examination Exemption Stream (EES)

was available to candidates meeting specific criteria and involved an additional documentary assessment and interview process in lieu of part of the examination process.

Between April 2001 and December 2006, one hundred applications were submitted to the PLEA process. PLEA “graduates” represented 45% of all applicants for registration during this time period.

All PLEA applicants were female and ranged in age from their early twenties to early sixties. Although data was not systematically collected regarding English language fluency, staff estimate that approximately 25% of applicants had English as a second language (see below for more information about this group).

Applicants were all educated as midwives outside of Canada although some were raised in Canada and were Canadian citizens from birth. Applicants were educated as midwives in 42 different programs in the following 13 countries: USA (38%), UK (21%), Iran (13%), New Zealand (11%), Germany (5%), Australia (3%), China (2%), Nigeria (2%), Philippines (2%), Chile (1%), Ireland (1%), Peru (1%), and South Africa (1%). Candidates completed both direct-entry and post-nursing midwifery education programs.

Of the 79 applicants that had been assessed to December 2006, sixty-six have been granted eligibility to take exams. The remaining 13 applicants were ineligible to proceed due to incomplete documentation (4), inadequate midwifery education (5) or insufficient or non-current clinical experience (4). An additional five portfolios were not assessed due to being judged too incomplete to put forward to assessors; these applicants were given the option to complete their files for assessment in the following year.

Of the 66 granted eligibility to take exams, 16 candidates did not attempt to take an examination. Reasons appeared varied. Some candidates decided to delay

or not to pursue registration in BC for a variety of reasons, such as gaining registration in another province, their spouse gaining a position in another place, or a decision to return to school for further studies. Others have not yet attempted exams for family-related reasons such as the need (or desire) to look after small children and/or financial struggles. A significant number were challenged by the requirements for professional level English language fluency. Some candidates planned from the outset to do the process over a number of years.

Thirty-nine candidates took the written exam and thirty-five have passed it (two with two attempts each). This is a pass rate of 90%. An additional 10 out of 10 applicants were granted exemption from the written exam via the Examination Exemption Stream process whereby applicants provide written documentation to provide evidence of their competence. Forty-nine attempted the clinical exam and forty achieved a passing score. This is a pass rate of 82%. Of these 49, four of four applicants were exempted from the general competency exam day via the Examination Exemption Stream process described above.

Forty-three applicants were granted eligibility to apply for registration and of these, thirty-seven have registered. One is no longer eligible to apply due to the expiration of a two-year time limit for registering. Known reasons for delayed registration include immigration issues, wanting to stay home with children, wanting a break between school and starting to work as a midwife, and wanting to earn money for a while prior to undertaking a required period of supervised practice requirement (conditional registration) where income is limited.

Of the thirty-seven who have successfully registered via PLEA, registrants were educated as midwives in direct-entry and post-nursing programs in the following six countries: USA (58%), New Zealand (19%), UK (14%), Australia (3%), Ireland (3%), South Africa (3%). If we include the additional seven applicants that were granted eligibility to apply for registration but have not yet done so, the number of

countries increases by one and the percentages become: USA (53%), New Zealand (19%), UK (16%), Germany (5%), Australia (0.5%), Ireland (0.5%), and South Africa (0.5%). It must be noted that the relatively small numbers of applicants means that percentages change readily with each additional midwife.

Six (16%) of the 37 IEMs who registered in BC have subsequently resigned. Reasons include not being able to successfully complete their period of conditional registration (i.e. competency gaps), needing to live outside of the province, difficulties integrating into Canadian midwifery, and, for one candidate, a dislike of the reality of working within the model of practice with on-call requirements.

As noted above, approximately 25% of applicants have English as a second (or additional) language. Of these, about a quarter were not able to successfully complete their applications. A significant number did not correctly complete the application form, filling in parts incorrectly or missing them altogether. Other issues included lack of adequate documentation of midwifery education or clinical experience and lack of professional references. These problems were not exclusive to this group of applicants but they do represent six of the nine applicants whose application portfolios were deemed incomplete. Of the remaining 15 applicants, 14 were found eligible to take examinations. However, only three of these applicants attempted examinations. Again, this group of applicants represent about two-thirds of the group of eligible applicants who have not yet attempted an examination. Finally, of the three that attempted exams, two passed and are eligible to register.

2.1.2 Alberta

The Alberta Midwifery Health Discipline Committee's Prior Learning and Experience Assessment (PLEA) process during the period analysed, included a basic portfolio assessment involving review of educational and clinical experience, and English fluency documentation. Successful candidates then took

part in written and clinical OSCE examinations covering both general competency and emergency skills.

Alberta has offered Prior Learning and Experience Assessment since 2002 and a small number (less than twenty) of applicants have submitted applications during this time. Feedback from potential applicants indicates that the fact that midwifery is not publicly funded in Alberta is a factor that limits applications for assessment.

All but one applicant that did apply have been female. Applicants have been educated in direct-entry and post-nursing programs in a variety of countries including Australia, Iran, New Zealand, UK, Iceland, Ireland, and the USA. Given the similarities in the candidate population to that in other jurisdictions, it seems reasonable to assume that the gaps identified in other provinces would be consistent for Alberta. A review of the assessment reports from seven Alberta candidates that took clinical exams in BC supports this assumption.

2.1.3 Manitoba

The College of Midwives of Manitoba's Prior Learning and Experience Assessment (PLEA) process during the period analysed included an in-depth portfolio assessment involving review of educational and clinical experience documentation as well as receipt of proof of English language fluency. Successful candidates then took part in written and clinical OSCE examinations covering both general competency and emergency skills. Candidates who were informally educated in a self-directed learning format were permitted to apply but had to submit more extensive documentary evidence linked to the provincial competency statement.

Twenty-eight applicants have applied to the CMM's Prior Learning and Experience Assessment (PLEA) process between 2003 and January 2007. Two applicants were male and twenty-six were female.

Applicants were all educated as midwives outside of Canada although some were raised in Canada and were Canadian citizens from birth. Based on their countries of education, it would appear that approximately 14% had English as a second or additional language. Applicants were educated as midwives in 14 different programs in the following nine countries⁵: USA (38%), UK (23%), Australia (8%), Canada - self-directed learners (involves study in other countries) (12%), and less than 4% each in Argentina, Australia, Iran, Macedonia, and New Zealand. Candidates completed diverse midwifery education programs, including as noted above, student-directed learning models partially carried out in Canada (i.e. non-formal midwifery education).

Of the twenty-eight applications received, two were withdrawn by the applicants prior to being assessed after discussions with the Registrar about the PLEA process. Four applicants were found ineligible to proceed to examinations.

Seventeen of the 22 eligible applicants attempted the written exam and 13 passed. This is a pass rate of 76%. Seventeen⁶ attempted the clinical exam and 13 passed. This is a pass rate of 76%.

One of the unique situations in Manitoba is that the CMM has agreed to assess a number of candidates for other jurisdictions. In addition, five applicants withdrew from the process prior to taking the examinations in order to enter the International Midwifery Pre-Registration Process (IMPP) in Ontario.

⁵ Based on available data regarding 26 of the 29 applicants to the MB process.

⁶ A BC candidate also attempted the general competency clinical exam in Manitoba but as her data is reflected under BC, it has not been included here.

Thirteen applicants were granted eligibility to apply for registration in Manitoba. Eight of these registered and have all remained registered and practising in Manitoba to date. Of the other applicants, three had been in the process with the intention of registering in the Northwest Territories and they did so following receipt of their eligibility letter from CMM and another moved to Alberta and registered there. It is unclear why the 13th applicant has not yet registered.

Of the eleven applicants granted eligibility to register for whom countries of education is known, they were educated as midwives in direct-entry and post-nursing programs in the following three countries: USA (55%), UK (27%), and Australia (18%).

Note that the numbers of candidates are small so percentages can change significantly with each candidate's experience; this must be kept in mind when interpreting this data.

2.1.4 Ontario

The College of Midwives of Ontario (CMO) offered a PLEA process from 1995 to 2001 that involved competency-based written and clinical exams (portfolio assessment was dropped after the first year). The College delivered three cycles of PLEA before deciding to pursue funding for a bridging program through the Ontario Ministry of Training Colleges and Universities.

Approximately 200 applicants applied to the process during this period. Of these, all were female. Applicants were educated in a variety of post-nursing and direct-entry programs and included an "informal training" stream to allow access to North American apprentice trained midwives. Applicants' countries of midwifery education included Czechoslovakia, France, Ghana, Hong Kong, Holland, Iran, Jamaica, Japan, Lebanon, Nigeria, Philippines, Serbia, Slovakia, South Africa, Switzerland, Trinidad, Poland, Ukraine and the USA.

In total, over the three cycles a total of 64 midwives were registered, a handful more were eligible (they successfully completed the program) but chose not to register. The majority of successful candidates were from Iran, the UK or the USA. During this period the pass rate for the PLEA program was approximately 32% (calculated from applicants accepted into the program, not applications received).

After the third cycle in 2000-01, The CMO decided to offer the program less often (every 2 years) due to the fact that it was too costly to offer annually. The “clear need for an upgrading and educational component” (Martin 2004) had been identified throughout two external and one internal evaluations of the program so when funding was available for a bridging program, the College decided to discontinue its PLEA program and rely on the IMPP bridging program. The main barriers to successfully integrating IEMs that were identified by the evaluations were:

1. lack of professional language fluency;
2. need for clinical knowledge and skills;
3. need for orientation to midwifery practice in Ontario (2005).

As of 2002, all internationally-educated applicants wanting to register in Ontario have had to participate in the International Midwifery Pre-registration Program (IMPP), a 9 month in-person midwifery bridging program that combines education and assessment. For the first several years, only Ontario residents were eligible to apply, precluding IEMs who may still reside overseas or in other provinces.

The IMPP is offered by Ryerson University’s Chang School of Continuing Education. OSCE assessment is carried out as part of the entry process and during the program. Candidates are evaluated in their clinical clerkship and they must pass a final written exam. The CMO requires no further competency assessment for IMPP graduates to be eligible to apply for registration.

From 2002 to 2006, 102 IEMs participated in the IMPP. 55% of these students required support with English language skills (Tyson 2006). Additional data on participant profiles is currently unavailable beyond the first three years, but the IMPP *Bridging the Gap* 2005 report, provides the information that follows regarding the first three years of the program. During that period, the 61 students were all female and ranged in age from 26 to 54. Thirty-eight were employed while students in the IMPP. Most students had been in Canada one to three years, although a significant number had been in Canada longer including 16 who had been here more than five years. There was a wide range of numbers of years of midwifery experience but most had one to three years midwifery experience. These IEMS were educated in the following countries: Iran (32%), USA (18%), England (17%), Philippines (11%), Bulgaria (3%), Nigeria (3%), Argentina (2%), China (2%), France (2%), Guinea Bissau (2%), Lebanon (2%), Palestine (2%), Switzerland (2%), the Ukraine (2%).

According to data provided by Director Holliday Tyson, of the 102 IEMs who entered the IMPP, 27 were still completing the program and 58 had graduated by October 2006. Taking into account the 27 that were still in the program, this appears to be a 77% overall success rate. Forty-seven of the 58 graduates were working as midwives in Ontario by October 2006. If we subtract the three graduates who had just completed exams in October 2006, 76% of graduates had been successful in obtaining work as a midwife in Ontario (Tyson 2006). Information is not available regarding the countries of education of graduates of the IMPP or of those who have registered.

2.1.5 Quebec

The Ordre des sages-femmes du Québec's assessment process during the period analysed included a basic portfolio assessment of educational and clinical experience documentation. Successful applicants then proceeded to written and

clinical OSCE examinations. The final step in the process included a period of clinical practice during which candidates were evaluated according to a structured “evaluation grid”. In addition to this latter clinical evaluation, another major difference between Quebec’s assessment process and those in other provinces is that the examinations were developed, maintained, and administered by an external organisation with expertise in health examinations rather than by the OSFQ (the midwifery regulator).

Quebec has had approximately 35 applicants going through three cycles of a PLEA process between 2001 and 2006. All were female. A few of these applicants were apprentice-trained in Canada but the majority were educated as midwives outside of Canada. Most applicants⁷ were educated as midwives in a variety of direct-entry and post-nursing programs in the following countries: France, Algeria, Tunisia, Peru, Switzerland, Belgium, UK and Iran.

Comprehensive statistics are not available but it is clear that the overall success rate for the PLEA process was quite low. For example, in 2004, of 14 initial applicants, three were ineligible, 4 withdrew from the process, and only 7 proceeded on to the written exam. Of these seven, only two proceeded to the clinical OSCE exam; only one of these candidates was successful in passing this exam. Between 2001 and 2004, the pass rate for the written examination appears to be approximately 55% and the pass rate for the clinical examination is yet lower.

2.1.6 Northwest Territories

Legislation in the NWT requires IEMS to be “registered or eligible to register” in another province or territory in order to be eligible to apply for registration in the NWT.

⁷ Data on place of education is not available for all applicants.

Since regulation in 2005 and the registration of the initial registrants, the College of Midwives of Manitoba has assessed IEMs who wanted to register in the NWT. Three IEMs, two female and one male have been involved in this process. Two were educated as midwives in Australia and had work permits in Canada. One was educated in the UK and is a Canadian citizen. All three were educated as midwives in post-nursing programs.

All three IEMs have successfully completed the assessment process. None are currently working as a midwife in the NWT. Two have left the country entirely, and the other is currently working as a nurse in the NWT. It is unclear exactly why these IEMs did not remain practicing in the NWT. It may be related to the transient nature of the non-Inuit northern population and the challenges related to regulated midwifery being a new and very small profession. The lack of specific orientation to working as a midwife in remote northern areas may also be a factor.

2.1.7 Pan-Canadian Context Analysis

There have been approximately 440 IEMs who have applied to be assessed for registration as midwives in Canadian provinces or territories in PLEA processes⁸. The vast majority of these applicants have been female but there have been a few male applicants as well. Although statistics are not available for all provinces, it is clear that the percentage of applicants applying to assessment processes who are not yet fluent in English or French varies quite a bit, from approximately 14% in Manitoba to 55% in Ontario's IMPP bridging program.

Although all are internationally-educated, this group includes Canadians who went outside of the country for midwifery education (at least partly due to the limited education opportunities in Canada). Applicants have been educated both

⁸ This number excludes the IEMs who participated in the “grandmothering” processes in each province where midwifery was becoming regulated.

formally and informally although the vast majority have formal midwifery education. Applicants with formal education have been educated in both direct-entry and post-nursing midwifery programs in the following countries: Algeria, Argentina, Australia , Belgium, Bulgaria, Chile, China, Czechoslovakia, France, Germany, Ghana, Guinea Bissau, Hong Kong, Holland, Iceland, Iran, Ireland, Jamaica, Japan, Lebanon, Macedonia, New Zealand, Nigeria, Palestine, Peru, Philippines, Poland, Serbia, Slovakia, South Africa, Switzerland, Tunisia, Trinidad, Ukraine, UK, USA. There have been significant numbers educated in Iran and UK applying to all provinces, and many educated in the USA have applied to all Anglophone provinces. BC has received a considerable number of applicants educated in New Zealand, Ontario has received quite a few applicants from the Philippines, and Quebec has had a relatively large number of applicants from northern African countries.

All PLEA assessment processes for IEMs have included written and clinical exams. Most have included some form of portfolio assessment looking at midwifery education, clinical experience, and language fluency, although this part of the assessment has varied in how in-depth it was. Comprehensive statistics are not available from each province so a comparative analysis of each stage is not possible. From available statistics for BC, Manitoba, and Ontario, it appears that just under half of IEM applicants have successfully completed PLEA processes. One factor this doesn't account for is the fact that a number of PLEA applicants have not yet taken exams but are still eligible to continue the process (generally for 4 years after they have received eligibility to take exams). If these applicants do eventually successfully complete the PLEA process, the success rate will increase. The IMPP process reports a 77% success rate to October 2006, which represents a significant increase over Ontario's previous PLEA success rate of 32%.

Consistent barriers were identified through the PLEA assessment processes across the country. Anglophone applicants were more successful in Anglophone

provinces than applicants with English as a second or additional language. IEMs from cultures more similar to Canadian culture (ie US, Europe, Australia, New Zealand) appear to have been more successful than those from other regions. In particular, it is noticeable that a relatively large group of Iranian applicants were received and a much smaller group have successfully completed the assessment processes.

The NWT has a particular problem keeping IEMs in practice once they have successfully completed an assessment process; this may be related to the transience of health care workers in the north but may also be related to the need for more education and support regarding practice in remote locations.

Finally, an important finding of this analysis of candidate information is that there is a need for a harmonized approach to collecting and maintaining data so that pan-Canadian analyses are more complete to increase their usefulness for future decision-making.

2.2 Competency Gaps

Due to the fact that detailed statistics are available only for British Columbia and Manitoba and the latter has very few applicants, the identification of gap areas was done by careful analysis of BC data which was then compared to the data that was available from other regulated jurisdictions.

Overall, gaps were identified across the spectrum of midwifery care from conception to six weeks postpartum. Gaps ranged from a lack of knowledge in specific required areas to an inability to perform certain midwifery functions according to Canadian standards, and included knowledge and skills in both normal midwifery situations and abnormal situations. Some gaps were identified very infrequently, while others, especially those related to the Canadian model of practice, were common.

2.2.1 Gaps by Broad Competency Areas

The process for identifying broad competency gap areas involved first grouping the more specific gap statements found on the BC assessment reports under common themes. For example, both “informed choice” and “choice of birth setting” were placed under “model and scope of practice”. Table One, below, identifies the percentage of BC exam candidates that needed improvement in one or more aspects of the competency areas listed. Note that almost all candidates, including those that pass with high marks, are offered suggestions for improvement on their assessment reports, and these are incorporated below. The high percentages below do not necessarily represent critical gaps in these areas. Rather they are indicators of the number of suggestions (gap statements) provided to BC candidates in each competency area and they tell us that there are indeed gaps identified across the whole scope of midwifery practice and in each competency area.

Table One: Percentage of BC Exam Candidates with Gaps by Competency Areas	
Competency Gap Area	FREQUENCY (% of candidates with this gap)
GENERAL COMPETENCIES (Incl. Education & Counselling and Professional and Other Aspects of Profession)	
Model and Scope of Practice	95%
Standards of Practice	83%
Communication & Woman-centered Care	86%
ANTEPARTUM CARE	
Antepartum Care – Diagnostic & Pharmacology	83%
Antepartum Care - Knowledge	64%
Antepartum Care – Assessment (Maternal & Fetal)	71%
INTRAPARTUM CARE	
Intrapartum Care – Diagnostic & Pharmacology	88%
Intrapartum Care – Labour Management	95%
Intrapartum Care – Emergency	100%
POSTPARTUM CARE	
Maternal Postpartum Care (incl. breastfeeding)	86%
NEWBORN CARE	
Newborn Care - Knowledge	64%
Newborn Care – Assessment	67%

It was possible in some instances to place a statement in more than one gap area and in these cases it was necessary to choose which was the most applicable area based on the most probable reason for it being there. For example, an identified gap in labour management regarding prolonged rupture of membranes may also be addressed under pharmacology to address the potential need for antibiotic recommendations. In reviewing the data overall, the researchers are confident that Table One is representative of the significance of gaps vis-à-vis broad competency gap areas.

Equivalent data from other provinces is not available.

2.2.2 Gaps by Specific Topics

Table One shows the breadth of the competency gaps as well as the importance of each area related to the others. It is clearly evident, for example, that Model

and Scope of Practice is an important gap area and also that all broad competency areas will need to be addressed in gap training. However in order to determine more specifically the actual issues to be addressed in a bridging program, it was crucial to look more closely to see what the most significant gaps under each broad competency area were, and to determine how severe each gap tended to be.

Tables Two to Seven (below) list the frequency of the topics that were identified as a gap for more than 10% of BC candidates, per broad gap area. These tables provide an indication of the severity of the gaps per candidate by also providing the percentage of candidates where the gap was identified on more than one aspect of the assessment (for example, in the written and several exam OSCE stations). Where available, information from other provinces has been presented in narrative format after the tables, so that the reader can see the similarities and differences between gaps identified in the various jurisdictions in Canada.

Canadian Midwifery Practice

As Table Two below indicates, the majority of BC candidates have gaps in their knowledge and application of competencies related to practising in Canadian midwifery.

Table Two: Most significant gaps* for BC exam candidates related to Canadian model and standards of practice (n=42)		
<i>* where more than 10% of candidates have the gap</i>		
GAP	FREQUENCY <i>(% of candidates with this gap)</i>	SEVERITY <i>(% of these candidates with gap identified more than once in assessment)</i>
MODEL OF PRACTICE		
i. Scope of Practice	83%	76%
ii. Informed Choice	71%	57%
iii. Model of Practice	40%	30%
<i>TOTAL % of candidates with these specific gaps</i>	<i>88%</i>	<i>76%</i>
CHOICE OF BIRTHPLACE		

iv. Choice of Birthplace	38%	69%
v. Out-of-Hospital Births	45%	32%
vi. Hospital Births	50%	10%
<i>TOTAL % of candidates with these specific gaps</i>	79%	49%
STANDARDS OF PRACTICE		
Documentation/charting	55%	43%
Universal Precautions	31%	8%
Familiarity with Standards of Practice	33%	7%
<i>TOTAL % of candidates with these specific gaps</i>		
PROFESSIONAL COMMUNICATION		
Woman-centered communication	48%	40%
Midwifery Approach	21%	22%
Express Urgency Respectfully	67%	50%
Ensure maximum comfort for woman	33%	36%
Appropriate communication with a woman in labour	24%	n/a
Interprofessional communication	45%	32%
<i>TOTAL % of candidates with these specific gaps</i>	86%	56%

Model of Practice, including Choice of Birth Setting, and Standards of Practice

As is perhaps not surprising given the variations of “midwifery” practice around the world, issues related to working in the Canadian model of practice are the most significant, with assessors noting gaps for most candidates being identified more than once during examinations. Data from the analysis of Manitoba assessment reports supports this, although the most significant gap there appears to be a “familiarity with standards of practice” rather than the “scope of practice” noted in BC data. This is as likely to do with how assessors framed issues as it is an indication of differences between provinces. For example, a common issue identified in both BC and Manitoba has been incomplete knowledge of when to consult with or transfer care to a physician, an issue that could be classified as related to either “standards” or “scope”. In any case, all relate to a need for a better understanding of and ability to work within the Canadian model of midwifery and standards of practice.

The few assessment reports from Alberta that were reviewed in this study also indicate frequent gaps with regard to model of practice issues, as does information from Quebec where a tendency of some candidates to be “too interventionist” has been identified as a concern.

The need for adaptation to the Canadian model and standards of practice has also been identified by Ontario’s IMPP. Director Holliday Tyson notes that two of the three key gap areas identified by their examiners remain orientation to Ontario practice and language and communication (the third is “specific skills”, discussed below) (Tyson 2006). The IMPP notes that IEMs in their program demonstrate a lack of:

- language skills,
- orientation to a client-centered relationship,
- understanding of the culture of the workplace,
- familiarity with working in a practice, and
- knowledge of specific technologies in current use in Canada (Berman and Matsuda 2007).

Further the IMPP notes that all non-western prepared students need an orientation to the “medico-legal environment” (Berman and Matsuda 2007).

Professional Communication

In addition to the need for an orientation to the model and culture of midwifery practice in Canada, the data from all sources clearly indicate a need for an orientation to professional communication in Canadian midwifery. While basic fluency is an issue for some (see below under “Language Fluency”), gaps in professional communication are much broader and were not restricted to candidates with second language issues.

As noted above in Table Two, professional communication involves interacting appropriately with both clients and other health professionals in the Canadian midwifery model. The gaps identified are explained below as their titles (eg

“midwifery approach”) do not necessarily provide a good understanding of the actual issues.

Gaps labelled “midwifery approach” were when candidates failed to provide enough information to the woman so that she could make an informed decision, or when care was directed in such a way that women didn’t feel that they had choices. Candidates may not have answered a woman’s question or may not have provided reasons for a particular recommendation.

A gap in “women-centred communication” may have been identified when candidates used medical language and terminology rather than lay language with clients, when they did not make eye-contact with their clients, or more broadly, when a sense of partnership between a woman and midwife (candidate) was not established.

The gap labelled “communicating urgency respectfully “ generally represented when, in an emergency situation, candidates didn’t speak to the woman directly. Often they acted without speaking to the woman directly at all and the woman (actor) had to use probes such as “is everything alright, is my baby alright” in order to obtain information about what was happening.

Finally, gaps labelled “ensure maximum comfort for the woman” and “appropriate communication in labour” were identified when candidates either omitted to speak directly to the woman in labour or omitted to explain what was going on or failed to comfort the woman and appear confident in managing the situation. Sometimes, a lack of physical comfort measures were an issue as well.

Data available from Manitoba is entirely consistent, with the following key gap areas related to communication identified:

- midwifery approach (36%)
- communicating urgency respectfully (36%)
- woman-centered communication (15%)

- interprofessional communication (43%)

Information available from Quebec also notes that “counselling and advice” has been identified as a common problem area for exam candidates (Moise 2006).

Knowledge and Skills

The IMPP has identified that “knowledge and skill enhancement . . . [are the] most critical areas of need”. Holiday Tyson, Director of IMPP, has indicated that, “based on their experiences with 700 applicants and over 100 participants, including midwives from the UK and USA, they have realized that most midwives need extensive knowledge and skill enhancement. . . . In an effort to catalogue differences in program participants’ knowledge and skill gaps they concluded that a majority of people needed most of the program.”(Berman and Matsuda 2007) Key gap areas identified by the program are noted below in the applicable areas of this report.

A number of skills and knowledge gaps were identified by assessors during the BC examination of PLEA applicants; these are provided in detail in the tables below. The frequency and severity that each of these gaps were identified gives a sense of the significance of each one but it unfortunately does not clarify the nature of the gap. Is it a lack of knowledge or skills generally, or a lack of knowledge of Canadian standards in relation to the specific topics? Is it an inability to manage a situation as an autonomous, primary care health practitioner, or an inability to manage a situation in a specific setting? Further research is needed to collect gaps data in a way that clarifies the nature of the gap.

However, having said that, there is general consistency between the BC data and evidence that is available from all provinces regarding the knowledge and skills gap areas.

Antepartum

Anecdotal evidence indicates that IEMs tend to have difficulties carrying out a maternal physical assessment according to Canadian expectations. This is supported by the data from BC, shown in table three below. When we considered all the different components that come up in the Table and those identified as small gaps in the data (that are not reported in the table), such as hepatitis B and HIV, it is clear that history-taking is a challenge for many candidates as well. This is all supported by the fact that the antepartum exam stations where physical assessment and history-taking are a requirement have a relatively high failure rate in BC (15%) and in Manitoba (36%).

BC candidates were also challenged in managing care in accordance with evidence-based practice and informed choice in complex decision-making situations such as GBS, Postdates pregnancy, and other topics indicated below (and in other tables). And while the table below reports a frequency of 12% for “screening and diagnostic testing”, the real significance of this gap area is actually higher as other gaps on the list below also include gaps in screening and diagnostic tests, and some less significant gaps not reported here, such as “amnio” could be grouped under that title as well. (This points to one of the challenges of working with data with overlapping categories that was not meant to be used for this type of analysis.)

Table Three: Most significant gaps* for BC applicants related to knowledge of and management of antepartum (n=42)		
<i>* where more than 10% of candidates have the gap</i>		
GAP	FREQUENCY <i>(% of candidates with this gap)</i>	SEVERITY <i>(% of these candidates with gap identified more than once in assessment)</i>
ANTE – DIAGNOSTICS & PHARM		
Rationale for Urine and Blood Pressure Tests in Third Trimester	13%	17%
Glucose testing	10%	0%
Varicella	31%	0%
MSS	17%	0%

Toxoplasmosis	12%	0%
Screening & diagnostic testing	12%	20%
Thalassemia	29%	0%
Rh Management	29%	0%
GBS Management	52%	23%
Diclectin	14%	0%
ANTE - KNOWLEDGE		
Anatomy & physiology	21%	44%
Nutrition	12%	0%
Folic Acid Deficiency	10%	0%
Complications of Pregnancy	12%	0%
Post-dates pregnancy	24%	60%
Total		
ANTE - ASSESSMENT		
Obtaining History	43%	28%
Early Pregnancy	14%	0%
Maternal Cardiac Exam	21%	11%
Maternal Pulmonary Exam	12%	20%
Maternal Thyroid Exam	24%	0%
Abdominal palpation	10%	0%
Management of unengaged presenting part at term	19%	0%

In Ontario, the International Midwifery Pre-registration Program identified two key gap areas for almost all candidates: maternal physical assessment and genetic counselling. Director Holliday Tyson notes that 95% of their students have had to learn physical assessment of the well-woman, including heart and lung assessment. More than 90% of students have a lack of experience with “genetic testing and psycho-sexual counselling” and “information provision” on topics such as GBS, including virtually all those educated in “non-Western” countries. Even those students who have experience in this area still require an orientation to Ontario practices (Tyson 2006).

Intrapartum

Surprisingly perhaps, the intrapartum exam stations were the general competency stations in BC for which there was the highest number of fails (18%). Professional communication and knowledge of BC standards of practice is a

factor here, but there is also a long list of gaps identified that relate to the knowledge and skills needed to manage labour as an autonomous primary health care provider– signs of impending labour, fetal heart-rate monitoring (including electronic fetal monitoring), artificial rupture of the membranes, systematic approach to labour, induction, managing occiput posterior labour, lack of progress, etc.

The table below indicates again the gap areas that were identified most often on BC candidates' assessment reports. Again, it is not always clear if a gap is related to knowledge of or ability to manage. And particularly with pharmacology the specific gaps identified here may need to be presented in province-specific modules as drug schedules across Canada have considerable variation.

Table Four: Most significant gaps* for BC applicants related to knowledge of and management of intrapartum (n=42)		
<i>* where more than 10% of candidates have the gap</i>		
GAP	FREQUENCY <i>(% of candidates with this gap)</i>	SEVERITY <i>(% of these candidates with gap identified more than once in assessment)</i>
INTRA – DIAGNOSTICS & PHARM		
Risks related to antibiotic therapy	12%	0%
Drug dosages	26%	9%
Pharmacology	29%	25%
Pharmacological pain relief	57%	4%
Nitrous Oxide	45%	0%
Narcotics	52%	14%
Epidural	40%	0%
Oxytocin/Ergonovine	26%	2%
Follow-up drugs for severe PPH	19%	0%
INTRA – Labour Management		
Fetal Heart Monitoring	24%	10%
Artificial Rupture of Membranes	38%	0%
Induction	19%	0%
Managing Occiput Posterior labour	55%	4%
Lack of progress in labour	33%	0%
Labour assessment	40%	6%

Non-pharmacological pain relief	40%	6%
Active management of third stage	21%	11%
Techniques to protect perineum	21%	0%
Indications of placental separation	14%	0%

The IMPP notes that several significant gaps have been identified where more than 90% of students lack appropriate skills and/or experience. For example, many internationally educated midwives have worked in situations where there was a high volume of births, women were attended only from late labour, and thus there was minimal experience with vaginal exams over the course of labour. This has meant that less than half of their students have had vaginal examination skills practice with women in other than very advanced labour.

Another significant gap noted by IMPP is in interpreting ultrasound or fetal heart monitoring strips where less than 10% of their students have previous experience, and working in any capacity with women having epidurals, where again less than 10% of students have the experience that is needed in Ontario.

Emergency Skills

Table Five: Most significant gaps* for BC applicants related to knowledge of and management of emergency skills (n=42)		
* where more than 10% of candidates have the gap		
GAP	FREQUENCY (% of candidates with this gap)	FAIL RATE on Clinical OSCE Station
INTRA – Emergency		
Management of PPH	66%	10% (4/41)
Management of Shoulder Dystocia	50%	10% (4/41)
Management of Undiagnosed Twins	26%	10% (4/41)
Management of Undiagnosed Breech	43%	15% (6/41)
Management of Cord Prolapse	43%	17% (7/41)
Management of Fetal Distress	83%	5% (2/41)

There were a large number of specific gaps identified on BC candidates' assessment reports related to emergency skills. However, as the table above indicates, the pass rate for these stations was not all that low. This indicates that

while many candidates had gaps in knowledge or skills, few were significant enough to prevent them from safely managing the emergency presented. The most significant gaps that were identified for candidates included the ability to manage emergency situations using a Canadian midwifery approach and Canadian standards, to ensure an appropriate immediate response to management of such emergencies (e.g. calling 911 in an out-of-hospital situation) and to be able to follow logical steps throughout. Specific emergency skills that were identified as being particularly problematic include the management of resuscitation/intubation/meconium and knowledge of appropriate protocols for episiotomy.

Complete data sets from other provinces on this topic are not available, although a cursory analysis of the assessment reports from Manitoba and Alberta indicate similar issues.

Postpartum

Anecdotally, regulators are aware that many candidates do not have experience in providing care for a full six weeks postpartum, nor in conducting the six week visit. Maternal and newborn care to six weeks have been identified as gaps in the table below for a fair number of candidates.

However, it is unclear how significant these gap areas are. Exam pass rates have been relatively good in BC with about 10% (4/39) of BC candidates failing the exam station related to postpartum care, but pass rates have been somewhat lower in Manitoba where 21% (3/14) failed in Manitoba. If we combine these numbers, the failure rate would be only 13%. In terms of newborn care, only 5% (2/39) of BC exam candidates failed the exam station related to newborn care, while approximately 14% (2/14) of candidates in Manitoba failed the newborn station. It may be important to note that newborn OSCE stations in both provinces have tended to focus on the early postpartum care of the newborn, so these assessments may not be picking up competency concerns regarding

newborn care over the six-week scope of practice. Written examinations are likely addressing this area more broadly than the OSCEs.

Table Six: Most significant gaps* for BC applicants related to knowledge of and management of postpartum (n=42)		
<i>* where more than 10% of candidates have the gap</i>		
GAP	FREQUENCY <i>(% of candidates with this gap)</i>	SEVERITY <i>(% of these candidates with gap identified more than once in assessment)</i>
MATERNAL POSTPARTUM		
Maternal care to 6 weeks	17%	0%
Six-week postpartum visit	12%	0%
Complications of postpartum	10%	0%
Deep Vein Thrombosis	21%	0%
Infected Perineum	12%	0%
Septicaemia	38%	0%
Postpartum fever	14%	0%
Urinary tract infection	14%	17%
Endometritis	26%	6%
Mastitis	21%	11%
CARE OF NEWBORN – knowledge		
IUGR	29%	0%
Circumcision	12%	0%
Vitamin K (IM)	17%	0%
CARE OF NEWBORN – assessment		
Newborn care to 6 weeks	19%	0%
Newborn assessment	19%	25%
Six-week newborn visit	17%	0%
Assessment of general appearance	10%	0%
Assessment of head	19%	0%

Assessment of respirations	14%	0%
Assessment of heart	17%	0%
Assessment of abdomen	17%	0%

While little data is available from other provinces regarding specific gaps related to postpartum and newborn care, Ontario’s IMPP has found that approximately 95% of their students need support to be able to do a physical assessment of the newborn, including cardiac and lung sounds assessment (Tyson 2006).

Clinical Skills

In BC, candidates have a choice about whether to be examined in the clinical skills related to pelvic assessment, suturing, and IV & venipuncture. Some are able to be exempted via documentary evidence that proves their current competency in these skills. As well, those who know that they do not meet Canadian expectations for these areas can choose to address these skills during their period of supervised practice. Consequently, only 24% of candidates chose to take the pelvic assessment exam, 37% chose to take the suturing exam, and 29% chose to take the IV & Venipuncture exam. The data below, which is based on these few candidates who chose to be examined in these skills, suggests that pelvic assessment is a significant area, likely because many IEMs have not carried out PAP smears previously. It is less clear, from the data, how significant the other areas are, as the frequency of gaps noted and the fail rate do not appear to match up well.

Table Seven: Most significant gaps* for BC applicants related to specific clinical skills (n=10,15,12)		
* where more than 10% of candidates have the gap		
GAP	FREQUENCY (% of candidates with this gap)	FAIL RATE on Clinical OSCE Station
PELVIC ASSESSMENT	33%	30% (3/10)
PAP Smears	29%	

Speculum use	10%	
SUTURING	24%	0% (0/15)
Tying the knot	10%	
Local infiltration technique	10%	
IV & VENIPUNCTURE	10%	17% (2/12)

Based on their experience with their 102 applicants, Ontario's IMPP has concluded that less than 50% of IEMs have suturing skills. Less than 50% also have IV cannulation experience: "Almost all [students] from non-western countries who do have IV experience only have [it] with cannulation of the cubital fossa, so they need to learn how to work with the forearm and hand for their skill to be useful." Less than 50% of IMPP students have venipuncture experience or experience doing pap smears; "the wet-prep technique used in Canada is new to all but some from the US and England." (Tyson 2006)

2.3 Registration Requirements

2.3.1 Clinical Experience

There are a number of registration requirements that are related to clinical experience. While the specific numbers vary by province, all require some experience caring for women in a continuity of care model as well as experience in managing birth in both hospital and out-of-hospital environments.

Continuity of Care

The majority of IEMs have very little experience working in a continuity of care model and are required to obtain additional experience under supervision in the Canadian model to meet requirements for full registration. For example, two thirds of BC applicants (31/47) required additional births managed within a

continuity of care model in order to meet requirements for general (full) registration (30 births where the midwife also provided both antenatal and postnatal care to the woman).

Choice of Birth Settings

Canadian midwives are required to follow women to their choice of birth setting (hospital or out-of-hospital). Most applicants have insufficient experience in either hospital or out-of-hospital birth settings to meet full registration requirements. It appears that overall there are approximately equal numbers of applicant with gaps in each birth setting.

US nurse-midwives and most UK, French, and Australian midwives, as well as midwives from a number of other countries, have very little opportunity to manage out-of-hospital births due to the hospital-based model of practice in those countries. In BC, 45% of candidates had not managed enough out-of-hospital births in the previous five years to meet general registration requirements. In Manitoba, this percentage is even higher (57%). These applicants therefore need an introduction to managing out-of-hospital births and supportive supervised practice in this setting.

Some applicants, particularly direct-entry midwives from the US, have little or no experience as primary caregivers in hospital settings, or their experience is exclusively or primarily from student placements in developing countries. BC data indicate that 50% of applicants did not meet requirements for at least five births managed in a Canadian-style hospital in the previous five years. These applicants need to learn about how to work in a hospital setting as a Canadian midwife, about systems and technologies available in Canadian hospitals and about how to work effectively with other health care providers in this setting.

Canadian midwives must be able to provide objective and evidence-based information about the advantages and disadvantages of each birth setting to their

clients. The knowledge and ability to do this appears as a significant gap in Table Two which indicates that 38% of candidates were unable to effectively provide this information in exams. The IMPP has noted that the ability to counsel regarding place of birth is an issue for more than 90% of their students (Berman and Matsuda 2007).

2.3.2 Language fluency

Applicants in all provinces must provide evidence of language fluency in English or French, depending on the province. Data suggests that lack of professional-level fluency is a major gap area that prohibits most applicants with ESL or FSL from successfully becoming registered.

Communication issues related to a lack of fluency in English were identified for 10% of BC applicants and 75% of these IEMs had the issue identified by more than one examiner and/or assessor. BC data shows that of 25 ESL applicants, 6 (24%) were unable to complete applications whereas only 2 non-ESL applicants were unable to complete applications (8% overall). PLEA staff report that the types of errors made in applications by ESL applicants were clearly related to language. At the same time, it is likely that an additional reason for incomplete applications is the increased difficulties⁹ faced by candidates educated in developing countries; the six ESL applicants with incomplete applications were from China, Iran, Chile, and Nigeria.

While most ESL applicants applying to BC were granted eligibility to take exams pending provision of proof of English language fluency (14 of 19), only a very few have been able to provide that proof, despite a range of language fluency testing options, and fewer still have taken the registration exams (3 of 14, or 21%).

⁹ For example, inadequate communication/postal systems in developing countries can make it very time-consuming and expensive to obtain needed documentation of educational and clinical experience for candidates from developing countries.

The IMPP reports that 55% of their students require language support as determined by testing via a standardized second language test, the Midwifery Language Proficiency Test, an oral interview, and communication testing in clinical exams and simulations (Tyson 2006).

The College of Midwives of Manitoba agrees that language is a barrier, stating that several candidates have met all requirements other than language fluency but have not been able to meet that requirement. In addition they note that many potential participants have significant language issues; most of these IEMs refrain from applying so the impact of lack of English language fluency is unclear (Garvie 2006).

Language fluency was assessed at a later stage of the process in Quebec and data is not currently available to effectively gauge the impact of second language issues there, although it is believed that language issues are probably one of the reasons why some potential applicants refrain from applying to assessment processes (Moise 2007).

3. SUMMARY

The evidence indicates that there are consistent gaps that will need to be addressed by a pan-Canadian bridging program. Although some candidates are lacking in certain knowledge and skills, in general gaps appear to be mainly related to the differences inherent in Canadian midwifery vis-à-vis midwifery in other parts of the world. These gaps have an impact on the full scope of midwifery practice from antepartum to postpartum and newborn care.

Broad gaps in knowledge and understanding of the midwife's scope of practice and various facets of the model of practice were identified, especially providing evidence-based woman-centered care and informed choice and communicating appropriately for a midwife in Canada. As well, a myriad of more specific gap areas were identified, especially gaps related to the provision of care as an autonomous primary caregiver, that will need to be addressed. These include history-taking, physical assessment of the woman and the newborn, screening and diagnostic testing, pharmacology and prescribing, labour management, management of emergency skills, and management of care for a full six weeks postpartum. While it is not always clear from the data available exactly what the issue is in many cases, it appears likely that most have challenges with addressing each topic area within a Canadian framework as a primary care provider.

There are several registration requirements that IEMs typically lack that bridging programs should assist IEMs to meet. Bridging participants will need opportunities to work in both hospital and out-of-hospital settings, as they typically only have competence working in one of these settings. They also need the chance to work with Canadian midwives in a continuity of care model, as well as a part of the Canadian health care system.

Finally, many IEMs will need opportunities to enhance their basic language fluency in English or French (depending on the province they will practise in).

Provincial Comparison

The data is not consistent enough from each jurisdiction to fully assess the differences and similarities in gaps identified. However, it appears that gaps are relatively consistent. No gaps were identified as being relevant only to one jurisdiction.

4. RECOMMENDATIONS

- I. The bridging program must include significant orientation to the Canadian midwifery model and practice expectations.
- II. The bridging program must provide opportunities to all IEMs, regardless of their level of language fluency, about how to communicate appropriately as a Canadian health professional, and specifically as a midwife in Canada.
- III. The bridging program must provide education at a primary-care provider level in the management of:
 - a. Physical assessment of woman
 - b. History taking
 - c. Screening & Diagnostic testing
 - d. Pharmacology & Prescribing
 - e. Management of antepartum variations from normal
 - f. Labour management
 - g. Emergency skills
 - h. Newborn assessment
 - i. Six weeks of postpartum care for woman and baby
- IV. The bridging program must provide education in the following specific clinical skills:
 - a. Vaginal examinations in early labour
 - b. PAP smear and pelvic assessment
 - c. IV cannulation
 - d. Suturing
- V. The bridging program should provide support for province/territory specific education, such as “working in northern communities”.
- VI. A systematic data collection system is needed to allow for a better understanding of applicants and to ensure that data can be compared between provinces and territories.
- VII. Additional OSCE stations should be developed so that data on a broader sampling of competencies are available for future evaluations of this kind.

- VIII. Additional research is needed to pursue the reasons why IEMs decided not to apply to or not to complete PLEA processes. This would provide additional information regarding gaps for those who did not proceed to the examinations.

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