



## **Introduction**

In November 2009, the Maternity and Newborn Care Committee of the College of Family Physicians of Canada (CFPC) released a discussion paper entitled *Family Medicine Maternity Care: Implications for the Future*<sup>1</sup> which described a survey of Canadian family medicine maternity care teaching programs and the inherent challenges faced by these programs. The Working Group on Family Medicine Maternity Care Training was created to build on the recommendations outlined in this discussion paper. The Working Group, created by the Maternity and Newborn Care Program Committee, was charged with re-examining the suitability of current maternity care education and training in family medicine residency programs and reporting back to the Council of the Section of Teachers of the CFPC (Appendix A. Terms of Reference of Working Group). Membership of the working group included representation from the Section of Teachers, Accreditation, the chairs of family medicine, the CFPC Executive, the Section of Residents, and the Maternal and Newborn Care Program Committee. The Working Group on Family Medicine Maternity Care Training met primarily by teleconference and twice in person between April 2010 and October 2011. This paper summarizes the deliberations and recommendations of this Working Group.

## **I. Background**

The 2010 National Physician Survey (NPS) revealed that only 10.5% of Canadian family physicians offer intrapartum care.<sup>2</sup> Of those physicians, 2.2% were either going to retire or stop providing intrapartum care within the next two years. It is important to note that there are large regional variations among those who provide intrapartum care, ranging from a low of 0% of family doctors in Prince Edward Island to a high of 26.6% in Saskatchewan.

While a much higher percentage of family physicians offer prenatal care (approximately 42% in the 2010 NPS), this continued incremental decline in intrapartum involvement by family doctors has caused concern at many levels—from local to educational to governmental. However, it is important to note that Canadian Institute for Health Information (CIHI) hospital records indicate that 28% of labouring women in Canada had their intrapartum care provided by family doctors in 2009/10.<sup>3</sup>

The decrease in the number of family physicians providing intrapartum care in large urban settings has been striking. The decline has been less precipitous in smaller rural and remote areas. However, much smaller decreases have tremendous potential to disrupt obstetrical and, secondarily, general medical care in these communities.

The reasons for decreasing family physician involvement in intrapartum maternity care are well documented. The major factors cited include concerns about its impact on both personal and professional lifestyle, a lack of confidence or concerns about adequate training, questions about sufficient reimbursement, and, for some, concerns about litigation.<sup>4</sup> However, the trends have not all been towards declining involvement. National hospital data reveal that the number of deliveries per family physician has been increasing.<sup>5</sup> In addition, in Quebec, there has been a “resurrection” of family medicine maternity care. This has resulted from a purposive multi-pronged approach by the Ministry. Some strategies that have proven successful in that province include limitation of new billing numbers to physicians who provide essential services (one of which is intrapartum care) and financial support for mentorship of physicians who are starting to provide intrapartum care. In the mentorship program, both the new physician and their mentor are compensated for attending the same birth. A similar program exists in British Columbia.

While there is concern across the country about the declining number of family medicine “accoucheurs”, there is no question about the quality of intrapartum care which family physicians provide. Research confirms that family physician maternity care is as safe and less interventional in comparison with the intrapartum care of low-risk women by obstetricians.<sup>6-9</sup> In addition, it is well recognized that women appreciate the continuity of care offered by their family physician accoucheurs. The Canadian Maternity Experiences Survey<sup>10</sup> found that 88% of women who had the same provider for pregnancy and birth believed that this continuity was important. A total of 42% of women who did not experience this continuity believed that it would have been important to have had the same provider. Although it is not only family physicians who are able to provide continuity of care from prenatal through to postpartum care, family physicians can offer continuity of maternity care within a comprehensive, biopsychosocial model of primary care. Indeed, many would argue that a national maternity care system should be based in family practice/primary care.

## II. Challenges in Education and Training

New family medicine graduates have not been filling the gaps in intrapartum care provided by family physicians. This is not only a great concern in terms of the availability of family physician resources in practice, but also poses challenges for teachers providing intrapartum care in family medicine training programs.

Much has been written about education in family medicine maternity care, including factors that might be contributing to our residents' lack of interest in intrapartum care as an important part of their practice upon graduation. Medical students and residents enter training with their own value systems, as well as preconceived notions about the discipline of family medicine and the rewards or risks of attendance at births. The educational process affects these learners as they may encounter a "hidden curriculum" in both their undergraduate and postgraduate experiences. The hidden curriculum is defined by the Future of Medical Education in Canada (FMEC) report<sup>11</sup> as a "set of influences that function at the level of organizational structure and culture" affecting the nature of learning, professional interactions, and clinical practice. It includes what the medical students and residents learn outside of the formal curriculum and has the power to affect learners' perceptions of the desirability of a family medicine career, the rewards of providing intrapartum care, the role of the family physician within maternity care, etc. The FMEC report recommended addressing the hidden curriculum, which devalues generalism and family medicine, and "focusing on broadly based generalist content, including comprehensive family medicine."

Residents might encounter a lack of role models or challenging hospital environments and leave their educational programs feeling unequipped to provide intrapartum maternity care. Godwin et al.<sup>12</sup> followed an Ontario cohort throughout their family medicine residency and two years into practice, at which time only 16% were attending births. In contrast, the 2010 NPS<sup>2</sup> survey of family medicine residents indicated that 46.2% intended to provide prenatal care while 32.3% were planning to provide intrapartum care in their future practices. The 2007 NPS<sup>13</sup> revealed that 59.6% of family medicine residents felt that they were adequately trained in obstetrical care and that 25.2% and 22.2% felt adequately trained for vacuum-assisted deliveries

and manual removal of the placenta, respectively. Unfortunately, this question was not repeated in the 2010 NPS.

In 2006 the CFPC released a discussion paper entitled: “An approach to maternity care education for family medicine residents.”<sup>14</sup> Recommendations, based on the MNCC’s interpretation of the literature and expert opinion, encompassed learning opportunities, formative evaluations, and core competencies. However, it appears that few of the recommendations included in this paper were implemented by teaching programs in Canada. Reflecting on this fact, it appears that there was both concern about the process of the writing of the report and debate about its content. Although the Section of Teachers was involved in the final endorsement of the paper, programs were having difficulty in finding the resources to implement the recommendations. In 2009, the CFPC released another discussion paper by the MNCC based on a survey of the 16 Family Medicine Residency programs entitled “Family Medicine Maternity Care: Implications for the Future.”<sup>1</sup> The paper, which included ten recommendations, was circulated to department chairs and program directors. The paper received much support for its recommendations from the Chairs of Family Medicine. In particular, there was great emphasis placed on the recommendations that reinforce the unique nature of family medicine maternity care. Specifically, the need for residents to have access to family medicine role models and to be taught in a clinical environment that supports the family physician accoucheur were felt to be extremely important. Also deemed valuable were the recommendations that all residency programs have program and site directors for maternity care and that family medicine programs should facilitate undergraduate exposure to labour and birth.

However, despite the strong endorsement for the discussion paper, there was considerable discussion and debate about how to implement its recommendations. Departmental Chairs spoke about the struggles to ensure that core family medicine teaching units have faculty role models who provide intrapartum care. They were concerned about the financial implications of mandating emergency obstetrical training programs such as ALARM (Advances in Labour and Risk Management) or ALSO® (Advanced Life Support in Obstetrics). Program directors expressed reservations about their ability to provide all residents with the opportunity to achieve the competence to practice intrapartum care at the end of the two-year residency. Further, the

paper was seen as a catalyst for quite broad-ranging discussions about the place of intrapartum maternity care training within family medicine.

The Executive Committee of the CFPC felt that a working group should be created to build on the recommendations of the 2009 discussion paper and strengthen the teaching and practice of all aspects of family medicine maternity care. The composition of the working group and its deliberations reflect lessons learned from the previous two papers. There has been representation from and close liaison with the Section of Teachers Executive Committee, the Chairs' Committee, the Accreditation Committee, and other College committees as required throughout the entire process.

### **III. Principles of the Content and Context of Teaching**

The College of Family Physicians of Canada has introduced the Triple C Competency-based Curriculum (Triple C),<sup>15</sup> which is expected to be implemented in family medicine residency programs across Canada over the next several years. Triple C is comprehensive, focused on continuity, and centred in family medicine. Competency-based medical education in the 21<sup>st</sup> century has been defined as “an approach to preparing physicians for practice that is fundamentally oriented to graduate outcome abilities and de-emphasizes time-based training and promises greater accountability, flexibility, and learner-centeredness.”<sup>16</sup> This curricular approach will help educators and students to focus on clearly-stated desired outcomes of training. This will take the place of traditional time-based educational strategies currently employed in most residency programs. The competencies appropriate for family medicine training are defined by the CanMEDS–Family Medicine (CanMEDS-FM) framework. Competency material developed by the CFPC will guide programs in developing appropriate educational opportunities for their trainees. Preceptors will be expected to work with their residents in tracking and documenting the achievement of competencies. Emphasis will be placed on application of knowledge versus acquisition of knowledge, and on formative evaluation, monitoring of progression, and remediation (if needed) versus summative evaluation. The goal will be to produce family physicians who are competent to practice comprehensive, continuing care including maternity care (prenatal, intrapartum, and postpartum) and who are

thereby able to meet the needs of their communities and adapt to changes in the healthcare environment.

#### **IV. The Challenges of Curricular Change**

As the CFPC moves ahead with the Triple C curriculum, residency programs will be challenged to determine the curricular implications of this changed framework and to develop implementation strategies. The Working Group on Family Medicine Maternity Care Training was created before the College's Triple C Alignment Subcommittee had been established and before a framework had been developed. Thus, there were several gaps which could not be addressed by the Working Group.

The Working Group's mandate was to deal with the domain of maternity care. However, this group was working in parallel to other College committees which were in the process of changing the "Red Book," establishing a Special Interest and Focused Practice (SIFP) Council of Education, and determining how to align the new Triple C curriculum with recently developed evaluation objectives and CanMEDS-FM.<sup>15,17</sup> Although it would have been ideal to use the domain of maternity care as a case example of implementation of the new curriculum, the framework was not yet ready for the Working Group to fully complete its mandate. This paper has been released with the intention of revisiting the competency-based learning objectives at a later date.

#### **V. The Triple C Curriculum and Family Medicine Maternity Care Training**

The implications of Triple C for family medicine maternity care education will need to be explored. However, in many ways, this clinical area is the ideal platform on which to reflect upon the key messages of the Triple C report and to consider the practicalities of implementation. Certainly, family medicine maternity care exemplifies both the principles of comprehensive care and continuity of care. In addition, continuity of the learning environment is essential to the development of trust between learner and teacher, which is integral to progressively acquiring and being allowed to use procedural skills. It is particularly important that these intrapartum skills be taught within the context of family medicine and in a curriculum controlled by family

medicine teachers to enable residents to develop competence and confidence in their role as family medicine “accoucheurs.” These areas will be explored further in later sections of the report.

### **Evaluation of competence**

In accordance with the principles of competency-based curricula, the CFPC sets the expectation of what the end result of a two-year residency should be. However, it is up to the individual programs to determine the route to achieve these competencies.

The Red Book states that there must be an effective in-training assessment and evaluation program in place that helps the resident, the preceptors, and the program plan, and monitors the progress of each resident throughout their training toward the achievement of the competence expected for the start of independent practice. This will include competence in the six essential skill dimensions throughout the seven CanMEDS-FM roles, over a sufficient sample of the priority topics, phases of the clinical encounter, core procedures, observable behaviours, and competencies as defined by the Evaluation Objectives, and CanMEDS-FM.<sup>15,17</sup> These standards will apply to maternity care training as they do to all aspects of family medicine training. The core procedures and maternity care–specific competencies that are expected are discussed and provided elsewhere in this paper.

The methods of assessment and documentation for maternity care training will be consistent with all other areas of study and with Red Book guidelines. Situations and patients with problems consistent with family medicine practice will form the basis of assessment. Case discussions and direct observation will form the basis of most preceptor–resident evaluations. Multiple observers will strengthen the value of the assessments and could be planned or ad hoc. Field notes and daily evaluations should be used to facilitate and record resident progress. A portfolio of this documentation will assist the resident and preceptor to recognize the progression towards or achievement of competencies.

Summative reports should be done regularly and away from the clinical environment. Further, they should be based on the cumulative data acquired from multiple preceptors and evaluations.

## **Accreditation**

As family medicine training and the Red Book accreditation standards move toward Triple C, so should maternity care training. The competencies necessary in maternity care training have been defined by our Working Group but it is essential that the training programs use the fundamentals of Triple C to achieve these end points. Family medicine role models are essential and critical to the training being centred in family medicine. It is recognized that to achieve procedural competence in many of the core procedures necessary to practice maternity care especially intrapartum care, teaching and interaction with multiple varied other health care providers will be required. The delivery of superior maternity care often necessitates very solid inter- and intraprofessional collaboration. It is essential that the other health professionals understand and deliver their educational input in the context of family medicine learning. It is the expectation of the Working Group that the accreditation standards of both our College and the Royal College will put particular focus on the Collaborator role in this area. It is also hoped that accreditation survey teams of both Colleges will pay particular attention to the Collaborator role as it applies to maternity care training. Our learners and preceptors must truly understand the necessity of collaboration, as should the other disciplines with which they are interacting.

Continuity, as defined in Triple C, is often difficult to achieve in the area of maternity care within the context of family medicine training. The Working Group recognizes the extraordinary pressure which this places on precious teaching resources. However, efforts should be in place in all training programs to emphasize continuity within maternity care. The utilization of preceptors who practice intrapartum care, utilization of integrated obstetrical experiences which allow the residents to follow a defined group of patients through to delivery and postpartum care, and program support offered to residents who avail themselves to deliver infants at times when they are not on call, are all options to facilitate continuity.

## **VI. Competence in intrapartum care: a requirement for all residents?**

The establishment of the Working Group and the introduction of Triple C have provided an opportunity to review the fundamental principles of what family medicine maternity care training entails. More than one family medicine educator has advocated for the position that intrapartum proficiency should be not be a requirement of residency completion, but rather that

this skill should be reserved for those who are highly interested or should be acquired after the two-year residency has been completed.<sup>18,19</sup> Thus, the Working Group started from first principles on this topic, asking: “Should all family medicine residents be required to demonstrate competency in intrapartum obstetrics?” For many family physicians, this question is almost heretical, and yet only 10.5% of family physicians include intrapartum care in their practice. Our Working Group considered the positive and negative implications of dropping intrapartum teaching from our two-year core postgraduate programs and allowing residents the option of choosing a stream which did or did not include intrapartum maternity care.

### **The argument in favour of streaming**

Certainly family medicine programs would find it a relief not to have to struggle to find teaching sites and preceptors who could provide adequate volume and mentoring to ensure competence. Several programs have indicated a combination of falling birth rates and local circumstances have made finding good teaching experiences a problem. Removing the requirement for all residents would mean that high-quality experiences could be reserved for those residents who were desirous of becoming proficient in intrapartum care. More curriculum time would be available for the many other aspects of comprehensive care.

Since most family physicians do not practice intrapartum care, another advantage of dropping this requirement is that educational programs would mirror the practice environment more authentically. There are some cities with populations over ¼ million people and many hospitals where there are no family physicians providing maternity care. Acknowledging this reality by dropping intrapartum maternity care might suggest that the CFPC realized the current practice reality and was not clinging to an outmoded idea of the scope of practice of current Canadian family physicians. This also aligns with the practice and family medicine training programs in Great Britain and Australia, which do not require competence in intrapartum care but are given reciprocity by the CFPC for the purposes of certification. The public is also less likely to expect family physicians to carry out intrapartum care; midwives and obstetricians are identified publicly as sources of intrapartum care.

### **The argument against streaming**

A powerful argument in favour of retaining intrapartum care teaching is the slippery slope of the potential decline in quality of family medicine prenatal and women's health care. Those who have not experienced negative intrapartum outcomes such as sequelae of placenta previa or pre-eclampsia might be less likely to recognize the importance of identifying these conditions at an early stage during the antepartum period. Lack of comfort or exposure to intrapartum care and subsequent abandonment of prenatal care could lead to a lack of confidence on the part of the family physician in well-woman care, including gynecological examinations. A considerable cohort of international medical graduates are currently in our residency programs, many of whom have had limited exposure to gynecologic exams, let alone intrapartum care. If these residents are not trained in intrapartum obstetrics and prenatal care, they might avoid well-woman care.

We know that residents enter their residency programs with ideas about whether or not they intend to practice intrapartum care after graduation. Throughout their residency experience, many will change their minds. Although the direction is usually away from maternity care in their future practices (and this may be from a poor educational experience or other factors), there are also examples where a good maternity care training experience can cause a resident to change their mind toward wanting to practice intrapartum care. This latter group would not be well served by streaming, as they would not otherwise have the opportunity to obtain the clinical exposure that affords them the opportunity to change their minds.

Loss of intrapartum care as a competency threatens the generalist nature of family medicine. It separates that important life-cycle experience into a separate medical discipline and removes the benefits a family physician can bring to a woman and her family during the prenatal, labour, and birth experience. It is another step in removing family physicians from the hospital and the collegiality brought by physical proximity. It likely also implies a removal from newborn care and a further deterioration of clinical skills needed to care for infants in the first few days of life.

Rural communities in Canada, in particular, have relied on the skills of well-trained generalists. Removing the intrapartum requirement would do a disservice to those rural or remote communities which rely on generalist family physicians for maternity care, increasing the

risk to women from those communities who may then need to travel for prenatal or intrapartum care. The reaction of the thousands of CFPC members who currently do provide intrapartum care will also likely be negative. They would quite rightly feel abandoned by the CFPC.

In addition, one needs to consider the implications for residency training in general. If residents are allowed to select what they will and will not include in their training, what will their final competencies include? Although it seems reasonable in some contexts to exclude intrapartum care from the education program, it raises important questions. Would other residents choose to eliminate care of children? Care of the elderly? The CFPC Working Group on Postgraduate Curriculum Review does not endorse the concept of streaming. The goal of residency training is to train the “full potential graduate” who has a skill set across the full spectrum of care. Thus, there should be no permission for residents to opt out of certain parts of the curriculum, including intrapartum maternity care.

After carefully weighing the considerations discussed above, the working group decided to recommend that competency in intrapartum care be retained by the CFPC in its educational standards.

## **VII. Who should be teaching family medicine maternity care?**

Family medicine training programs are governed by the CFPC’s “Standards for Accreditation of Residency Training Programs (the Red Book).<sup>20</sup> Although the latest edition of the Red Book has not been released, the Working Group felt that it was essential to address the question of who should be teaching family medicine maternity care. Certainly, there is increasing emphasis on the specialist nature of family medicine and the unique lens that the family physician brings to both the context and content of the practice of family medicine. The current principle that guides educational policy is that all training must be centred in family medicine. This includes teaching and role modeling by family physicians, as well as education experiences in environments that are supportive of the family physician and family medicine learners. Although the CFPC has no intention of implementing a policy requiring that all teaching be done exclusively by family physicians, the Working Group decided to explore the advantages and disadvantages of such a theoretical recommendation in order to better delineate some of the principles of family medicine maternity education.

Requiring that family medicine residents be taught exclusively by family physician preceptors has the obvious advantage of modeling the role that residents might be assuming in the future. If family medicine is a specialty, should not the experts in the specialty—family physicians—be its teachers? Family medicine teachers have a vested interest in training other family physicians to replace them, and thus might be more engaged in teaching their successors than other specialists. At their March 2011 meeting, the Section of Residents expressed their strong support for having family medicine role models teach maternity care.

Exposing residents to only family medicine obstetric preceptors would show them a model of care for women and children based on continuity and a trusted relationship, which we believe to be important and superior to episodic care. In addition, some recent research<sup>21,22</sup> suggests that compared with obstetricians, family physicians' attitudes toward the provision of maternity care are less oriented to technological intervention and more oriented toward the importance of woman-centred care.

This approach would be a difficult one for programs to implement, but would have the salutary effect of increasing obstetric skills in family medicine faculty and driving family medicine faculty development in the field. More teachers would likely need to be recruited for such an approach. This approach would also provide an affirmation of the importance of family physician obstetric services in communities and hospitals where this model is under threat. Because family physician accoucheurs work in a variety of practice models (including hard- and soft-call environments), residents could potentially be exposed to a number of ways of practising their discipline—one of which might appeal to them as a sustainable way of providing maternity care.

Teaching the context of family physician maternity care through family physician teachers fits best with the move to horizontal, competency-based curricula as opposed to time-based rotations.

Family medicine teachers also need to be involved in undergraduate education as important career choices occur during this time. Family medicine faculty should partner with their obstetrical and midwifery colleagues to ensure that undergraduate medical students have the opportunity to participate in birth. In particular, these students should be exposed to the role which family physicians play in maternity care. Family physicians can also be involved in

laboratory teaching with pelvic models, interprofessional teaching opportunities, and the Family Medicine Interest Groups supported by the CFPC. This role modeling and maternity care teaching should be extended to the clinical clerks during their family medicine rotations.

However, requiring that all teaching be done by family physician preceptors is the antithesis of interprofessional collaborative care, and could lead to professional isolation and a siloed experience. Although the context of teaching may be more “true-to-life” than a traditional obstetrical rotation, there is a risk that the obstetrical content of the teaching might be weak because of low volume, or the teacher’s lack of broad experience.

The largest challenge to programs arising from such a requirement would be implementation. Some distributed programs include no family physician intrapartum providers in their hospitals. The capacity of family physician teaching units to accept more teachers, especially if they have a focused rather than comprehensive style, is limited and might come at the expense of recruiting other teachers. This would be especially unfortunate if such new teachers drop obstetrics after a short period of time. Resident numbers would need to be cut if such a standard were to be introduced.

Currently, some hospitals cap the number of deliveries which may be attended by each category of provider. Increasing the number of family physician deliveries would lead to “turf wars” in these settings.

The Working Group committee feels that it is important that residents learn and understand the **context** of intrapartum care within the family medicine environment. The **content** of intrapartum maternity care can also be taught by obstetricians, midwives, and nurses, especially as they demonstrate their roles as collaborators and supporters of the role of the family physician. There is much that we can learn from each other, such as different approaches to birth from midwives and exposure to higher volumes of high-risk situations from obstetricians. However, residents need to have access to family physician accoucheur role models. Although it is desirable that these role models be situated within teaching units, if this is not possible, the resident should have access to these role models at other sites.

## **Role of collaborators in the educational process**

Collaboration is an integral aspect of maternity care. It is fundamental to both safe clinical practice and to the education of family medicine residents. To practice competent obstetrics—in particular, intrapartum obstetrics—and to have confidence in doing so requires a significant volume of learning experiences. With the number of family physicians in Canada practising intrapartum care declining, training programs must rely on our obstetrical colleagues for assistance. Some areas of the country may also need to utilize midwives as teachers of intrapartum care. We must have the willing involvement of these professionals to obtain adequate exposure for our learners and to role model the collaborative nature of maternity care. Our colleagues from other specialties must understand the curricular and contextual needs of family medicine residents to facilitate their developing competence and confidence. This requires collaboration of the highest order and means building on the recommendations of the Collaborative Action Committee on Intra-professionalism (CACI), a joint CFPC and Royal College of Physicians and Surgeons of Canada initiative.

We as family physicians must promote the highest standards of collaboration in this environment. Our accreditation standards must demand that our training programs demonstrate this. We suggest that our colleagues at the Royal College also make these standards of collaboration essential for their accreditation. Faculty development and indicators of appreciation from our training programs will support this endeavour and work toward ensuring superior training and care.

## **VIII. Curriculum and Maternity Care Competencies**

### **Curriculum**

Maternity care, like many other parts of the family medicine curriculum, has a “core content” of knowledge, communication, and procedural skills which residents must master. Family medicine maternity care also has a context which is unique to family medicine. This includes the care of pregnant women within the context of the family life cycle, continuity of care; and an evidence-based, low-intervention approach to labour and birth.

The Working Group requested that university programs across the country submit their current competency documents so that the Working Group could ascertain the expectations of graduates of the family medicine residency with respect to maternity care. Many programs are currently in the process of switching toward a competency-based curriculum in anticipation of implementing Triple C. Although there was great variation in the level of detail described and some variation in the level of competence expected, the general consensus was that the standard was somewhere between performing normal spontaneous vaginal deliveries and independently performing a vacuum-assisted birth.

On the one hand, an expectation of competence that is set too high is unrealistic and frustrating for teachers; on the other hand, it is not reasonable to adjust competency expectations based on what resources and limitations exist. It is up to the College to decide what standard of care a graduate of the residency program is expected to be capable of providing.

The availability of third-year programs in women's health and/or maternity care has caused some confusion for residents. There seems to be a hidden message that one cannot practice intrapartum care after only the core two-year residency and that a fellowship is required. While some learners require or prefer the extra volume of experience provided by the extra period of training, the goal of residency is competence for independent practice. Many residents who have been able to attend a large number of births and worked with encouraging family physician role models are able to provide intrapartum care upon graduation. However, the working group acknowledges that the first several years in practice are also opportunities for learning and that careful mentorship is invaluable to new graduates who provide intrapartum care.

There has been an increase in the uptake of third-year positions in low-risk maternity care across the county. These programs are not designed to remediate what is not taught in the two-year residency, but rather to provide enhanced skills. These may include extra technical skills such as forceps or Caesarean section capability, or the extra training required for someone considering an academic career. The Maternal and Newborn Care Program Committee, as part of the SIFP Committee, will be examining the role of third-year programs in maternity care and setting national standards for these programs.

Based on this review of the curriculum, the working group recommends that at the end of the two-year residency, residents must be able to do the following:

Provide prenatal care until term for women at low obstetrical risk

Recognize and appropriately manage complications of pregnancy

Independently perform a spontaneous vertex vaginal delivery

Manage common intrapartum problems

Recognize indications for and appropriately manage assisted vaginal births

The Working Group also endorses the current Red Book description of the clinical domain of women's health care:

“Maternity care (antepartum, intrapartum, postpartum):

The resident **must** gain confidence by following pregnant patients and conducting deliveries with family physician role models. Competencies include the common procedures during labour and delivery that permit the resident to complete low-risk deliveries independently. Residents **must** be competent in managing obstetrical emergencies.”

There is the expectation that the resident should be capable of practising the full scope of family medicine maternity care upon leaving residency.

The Working Group also reviewed educational objectives for maternity care education and proposes the following (with changes from the original indicated in bold type):

### ***Pregnancy***

1. In a female or male patient who is sexually active, who is considering sexual activity, or who has the potential to conceive or engender a pregnancy, use available encounters to educate about fertility and consequences of pregnancy, **safer sex, and contraception.**
2. In a patient who is considering pregnancy:
  - a) Identify risk factors for complications
  - b) Recommend appropriate changes (eg, folic acid intake, smoking cessation, medication changes)
3. In a patient with suspected or confirmed pregnancy, establish the desirability of pregnancy.
4. In a patient presenting with a confirmed pregnancy for the first encounter:
  - a) Assess maternal risk factors (medical and **psychosocial**)

- b) Establish accurate dates
  - c) Advise the patient about options for ongoing care within her community, **including the roles of different health care providers (such as midwives, nurses, physician assistants, obstetricians, and family physicians) and place of birth.**
5. In pregnant patients:
- a) **Provide normal prenatal care and anticipatory guidance**
  - b) Identify those at high risk (eg, teens, victims of intimate partner violence, single parents, IV drug abusers, impoverished women)
  - c) Refer these high-risk patients to appropriate resources throughout the antepartum and postpartum periods
  - d) In at-risk pregnant patients (eg, women with HIV infection, diabetic, hypertensive or epileptic women) modify antenatal care appropriately
6. In a pregnant patients presenting with features of early and late antenatal complications:
- Early complications
    - In cases of early pregnancy loss:**
      - a) **Avoid minimizing loss; provide support in bereavement process**
      - b) **Manage the process of spontaneous abortion**
  - Late complications (eg, PROM, hypertension, bleeding):
    - a) Establish the diagnosis
    - b) Manage the complication appropriately
7. During labour:
- Encourage evidence-based practices consistent with supporting normal physiologic labour (positioning, comfort measure, intermittent auscultation, one-to-one support)**
8. In a patient with clinical evidence of complication in labour (eg, dystocia, abruption, uterine rupture, shoulder dystocia, **atypical or abnormal** fetal monitoring)
- a) Diagnose the problem
  - b) Manage the complication appropriately
9. In the normal postpartum patient
- a) **Give anticipatory guidance (transition to parenthood, physical recovery)**

**10. Postpartum complications:**

- a) With clinical evidence of a complication (delayed or immediate bleeding, infection), diagnose and manage the problem
- b) Identify depression, and distinguish from “postpartum blues”; manage as appropriate

**11. In the breastfeeding woman:**

- a) **Encourage evidence-based practice consistent with establishment of normal breastfeeding**
- b) Screen for and manage dysfunctional breast-feeding (poor latch, poor letdown)

**12. In the context of maternity care demonstrate the ability to work in a collaborative environment with all members of the health team.**

***Procedural skills:***

- Normal singleton vertex delivery**
- Amniotomy**
- Placement of fetal scalp electrode**
- Demonstration (by simulation if necessary) of assisted breech delivery; maneuvers to manage shoulder dystocia; low and outlet vacuum extraction**
- Repair of 1<sup>st</sup> and 2<sup>nd</sup> degree lacerations and episiotomy**
- Episiotomy where indicated**

**IX. Support for family medicine maternity care training**

**1. Characteristics of successful FM maternity care teaching programs**

Although “one size” does not “fit all” when it comes to maternity care training, it is helpful to reflect on the characteristics of a successful family medicine maternity care training program. In 1997, Taylor and Hansen<sup>23</sup> published the results of a Delphi process which involved 28 of 35 invited participants consisting of previous co-chairs of the STFM Group on Family-centred Maternity Care, department heads, or residency directors. The question posed was “What were the perceived characteristics of family practice residency training programs that produce a high

percentage of graduates who provide maternity care?" Table 1 lists those characteristics in general order of importance.

**Table 1. "Essential" characteristics identified in the Delphi Process<sup>23</sup>**

Characteristics of family medicine faculty and teaching services
<ol style="list-style-type: none"> <li>1. Family medicine faculty explicitly encourage and support those interested in providing maternity care</li> <li>2. Family medicine faculty model behaviours by providing maternity care</li> <li>3. Family medicine faculty are competent at maternity care</li> </ol>
Hospital
<ol style="list-style-type: none"> <li>1. Hospital administration supports family physicians doing maternity care</li> <li>2. Family medicine department credentials family physicians doing maternity care</li> <li>3. Nursing staff supports family physician maternity care</li> <li>4. Sufficient obstetrical volume</li> </ol>
Residents
<ol style="list-style-type: none"> <li>1. Positive (supportive/encouraging) obstetrical learning experience</li> <li>2. Adequate exposure to obstetrics during residency</li> <li>3. Have family practice role models</li> </ol>
Curriculum
<ol style="list-style-type: none"> <li>1. Adequate obstetrics volume to ensure competence</li> <li>2. Strong emphasis on the longitudinal experience of maternity care</li> <li>3. Curriculum encourages residents to do maternity care</li> </ol>
Obstetrics faculty and teaching service
<ol style="list-style-type: none"> <li>1. Family practice residents given real responsibility</li> <li>2. Mutual respect between obstetricians and family medicine faculty and residents</li> <li>3. Obstetrics faculty supportive toward family practice residents doing maternity care</li> </ol>
Locality
<ol style="list-style-type: none"> <li>1. Family physicians readily accepted in the community as maternity care providers</li> <li>2. Community family physicians provide maternity care</li> </ol>

Practice composition
1. Patient population is receptive to care

Adapted from Taylor HA, Hansen GH. *Fam Med* 1997;29:709<sup>23</sup>

Although some of these characteristics are not modifiable, many of them can be achieved through purposeful change. In 2002, Helton et al<sup>24</sup> published the results of their restructured pregnancy care curriculum. They had implemented many of Hanson's "essential characteristics" and were able to increase the average percentage of residents who included prenatal care or deliveries in their practices after graduation. The fact that some of these successful characteristics can be duplicated and make a difference is encouraging.

A research project is currently under way using qualitative methodology to explore Canadian program directors' perception of what constitutes a successful maternity care program. The final product will be to gather concrete examples of ways in which exemplary maternity care training programs address the universal issues of lack of family medicine role model involvement, inadequate volume of deliveries to ensure confidence, poor labour, and delivery environments and competence. It is hoped that these results can be used as a resource for struggling programs looking to implement change to strengthen their maternity care education programs.

## 2. The External Environment

Residents should train in maternity care environments where family physicians are treated as valued resources. The "Babies Can't Wait"<sup>25</sup> project described how the labour and delivery environment can be "hostile" for learners who feel they are competing for clinical experience and a hierarchy within the labour and delivery room. However, as common as this experience is for both family medicine faculty and residents, it is difficult to quantify factors that make a "family medicine-friendly" environment.

It is recognized that there are often ingrained hierarchies within the labour and delivery room. These hierarchies affect both clinician satisfaction and patient outcome. Programs such as Managing Obstetrical Risk Efficiently (MORE<sup>OB®</sup>) have as one of their objectives, the minimization of these hierarchies through effective communication and teamwork. However, despite the fact that progress has been made in many settings, family physicians and their learners continue to experience the deleterious effects of these hierarchies in some environments.

Ideally, departments of family medicine should control the privileging and credentialing of its members who provide intrapartum care and ensure that family physicians have a presence and a real voice on multidisciplinary hospital committees at all levels. Where this is not possible, consideration should be given to hospital governance models that include and respect all players. There should be open discussion about the consultation process, with preference for absence of mandatory consultations.

Family physicians should be seen as skilled teachers for all levels of medical learners, including those from other disciplines. In particular, they should be involved in the teaching of maternity care to undergraduate medical students to ensure that these early learners see family medicine role models. Family medicine residents should be embraced by the health team and included in all decision making involving the patient they are following. This would include providing access to the patients, allowing the resident appropriate hands-on experience and encouraging their presence for all consultations, etc. The continuity of care that some family physicians have with their patients should be valued by the team who meets the woman first in labour.

Family physicians should not be subjected to any differential volume restrictions or scrutiny of their care compared with their obstetric colleagues. In the case of conflict, there should be an equitable dispute resolution process. It is the view of this working group that the CFPC and RCPSC should address these issues formally at a national level, with results reflected in common accreditation standards.

### **3. Faculty support**

Although there are many studies looking at why family doctors no longer participate in intrapartum care, there is less information about why they start or continue to provide this essential service. Most family medicine accoucheurs will list reasons such as enjoying the continuity of care, having whole families in their practices, enjoying the technical components of intrapartum care, or sometimes the important fact that the community needs this service. For family medicine teachers based in academic teaching units, there is a multitude of competing demands, which decrease the likelihood that they will provide intrapartum care. This leads to

the question posed by family physician leaders: How does one create and support the role models so necessary for the education of our future family physicians?

Purposeful recruitment of faculty who provide intrapartum care is helpful to establish and maintain a core group of role models. Faculty themselves need time and support to hone their skills and acclimatize to new labour and delivery environments. Other barriers such as volume restriction within hospitals, societal expectations, and challenging interprofessional environments are more difficult to overcome.

The presence of a family medicine maternity care program site director can be of great support to local faculty who practice and teach intrapartum care. Depending on the local circumstances, some sites may benefit from the presence of an identified leader.

The 2009 survey of the family medicine programs<sup>1</sup> asked about support for maternity care faculty. Although several programs give faculty who provide intrapartum care and teaching no special considerations, others provide any one or a combination of the following: an hourly stipend, special provisions to retain their billings for maternity cases, paid fees for courses such as ALSO® and ALARM, free hospital parking, a recruitment bonus, time off “in lieu”, teaching stipends, and fewer call obligations for general family medicine.

It is unclear whether these incentives have the power to improve recruitment or retention of intrapartum care providers and teachers. However, they are an important indication of academic family medicine leaders valuing these skills. Several provinces have also implemented fee schedule changes which have positively affected the income of the average family medicine “accoucheur” with the hope of improving recruitment and retention. The research project mentioned above will be exploring support for faculty with the hopes that successful programs will share their practical suggestions, which can be replicated by other programs.

It should be noted that some provinces (British Columbia and Quebec in particular) have financial rewards for the mentorship of family physicians who are starting to provide intrapartum care. In these programs, both the mentoring physician and the new graduate are paid for the actual delivery, to a maximum number of mentored births.

#### 4. Different models of teaching programs

Although the Taylor and Hanson study enumerates some of the characteristics of successful family medicine maternity care training programs, the Working Group felt that it would be useful to give some examples of how some programs address some of the basic principles of maternity care education.

**Continuity of care:** Several longitudinal programs are able to “twin” every pregnant woman with a staff and resident family physician. Prenatal care is shared with the expectation that the resident attend the birth of “their own” patients if possible. The babies that are born become patients in the residents’ practices. Other programs place residents in maternity care clinics where family physicians conduct prenatal care and provide intrapartum care. Over time, the residents are able to follow parts of some women’s pregnancies and are encouraged to attend when these women go into labour.

**Family medicine role models:** Family medicine residents who are placed with community or academic teaching unit-based preceptors who provide prenatal and intrapartum care have the ideal exposure to family medicine maternity care. However, given the paucity of faculty who provide intrapartum care, this is not possible for most residents. The majority still learn most of their intrapartum skills from obstetricians in the labour and delivery unit. Some teaching programs have “repatriated” all of the maternity care teaching to the department of family medicine. Residents only work with family physicians in the hospital, though they collaborate with obstetricians, nurses, and other care providers (as do their preceptors). This allows the resident to experience different kinds of family physician call groups and styles of practice and ensures a uniformly positive attitude toward family physician maternity care from the teachers.

**Adequate volume for competence:** In environments where residents do not encounter an adequate number of births to achieve competence, rotations in busy labour and delivery units can be helpful, regardless of whether the intrapartum teachers are family physicians or obstetricians. It is critical that these specialists understand the goals of the family physician resident’s rotation and work with family physician preceptors to ensure that the resident is learning in an environment supportive of family medicine accoucheurs. Where residents experience inadequate volume (such as with some emergencies or other techniques such as

vacuum extraction), simulation can be very helpful. These simulations can be “low-tech” using very basic models, dolls, etc., or can involve sophisticated life-like simulators such as “Noelle”.

**Learning skills of collaboration:** As collaboration is integral to the practice of maternity care, residents will experience collaboration on many levels during their practical experiences. However, some programs have taken interprofessional, collaborative teaching to a higher level. For example, workshops about normal birth are conducted by family physicians, nurses, midwives, and obstetricians for learners from all of their respective disciplines. The aim is to provide a forum to understand each others’ roles and scopes of practice before encountering the stereotypes and challenges of the labour and delivery ward.

## X. Conclusions

The Working Group was established to examine the suitability of current maternity care education and training in family medicine residency. Under this directive, we revisited the possibility of streaming within family medicine maternity care training, whereby the precious resources for maternity care teaching are saved for those residents who intend to practise intrapartum care. However, after discussion and consultation, the Working Group made the strong recommendation that competency in full prenatal and intrapartum care should be retained by the CFPC in its educational standards. As the goal of training is to produce the “full potential graduate” who has a skill set across the full spectrum of care, there should be no permission for residents to opt out of certain parts of the curriculum, including intrapartum maternity care.

The Working Group proposes that whereas the **context** of family medicine maternity care should be modeled and taught by family physicians, the technical **content** may be taught by colleagues in obstetrics or midwifery as long as it is within environments in which family physicians and their learners are valued. Family physicians who provide intrapartum care are the preferred teachers and residents should have access to these family physician “accoucheur” role models. However, inter- and intraprofessional collaboration is critical to the practice and teaching of maternity care, and the CFPC should continue to be active in ensuring that this type of collaboration is required for full accreditation.

The Working Group supports the current direction of curricular change within the CFPC. Evaluation based on competency rather than duration of training is critical to ensure that the College and the public know what can be expected of a CCFP graduate. The Triple C curriculum focuses on the unique content and context of family medicine. Maternity care, including intrapartum care, is one of these key content areas. It is also a “flashpoint” for discussions about residency training due to the decreasing participation in intrapartum care by family physicians and resource constraints experienced by training programs. It is hoped that this discussion paper will be used as a foundation for further discussions about training in maternity care once the Triple C Alignment Committee has established a framework for integrating the standards for accreditation, Evaluation Objectives, and CanMEDS-FM. At that

time, the Working Group could reconvene to provide consultation about specific aspects of the maternity care curriculum.

## **XI. Recommendations:**

1. Competence in intrapartum care is a core competency for family medicine residents.
2. Streaming during residency, whereby residents can select aspects of maternity care that they will and will not practise, is not recommended.
3. Family physicians who practice intrapartum care are the preferred faculty to teach maternity care to residents.
4. Where family physician accoucheurs are not available, residents should be taught by specialist colleagues who exemplify collaboration and value family medicine maternity care.
5. Evaluation of residents should be based on competency rather than having completed a certain length of rotation.
6. Accrediting bodies should include demonstration of exemplary collaboration essential to full accreditation.

## Appendix A

### Working Group on Family Medicine Maternity Care Training Terms of Reference

**PURPOSE:** To build on the recommendations outlined in *Family Medicine Maternity Care: Implications for the Future*, with a focus on enhancing existing programmes, and strengthening the teaching and practice of all aspects of family medicine maternity care.

**RESPONSIBILITIES:**

- 1) To re-examine the suitability of current maternity care education and training in family medicine residency programmes.
- 2) To examine and strengthen the components of maternity care training within the two-year residency programme in family medicine.
- 3) To recommend ways to improve the exposure of medical students to family medicine maternity care.
- 4) To recommend ways to provide adequate and sustainable support and faculty development for family medicine maternity care teachers in residency programmes.
- 5) To recommend ways that will ensure all family medicine residency programmes have leadership and role models for maternity care.
- 6) To explore and make recommendations related to the potential for a third year enhanced programme in family medicine maternity care.

**Type of Committee**

Working Group of the Maternity and Newborn Care Committee (MNCC)

**Accountability**

- The Working Group is directly accountable to the MNCC
- The Working Group will liaise and communicate during its term with the CFPC's Accreditation Committee, the Section of Teachers (SOT), and other groups/experts considered essential to this examination, with regular reports to the MNCC and Executive Committee of the Board

### **Membership**

- Two members of MNCC, one of whom will act as Chair of the Working Group
- One member of the CFPC's Section of Teachers
- One member of the CFPC's Accreditation Committee
- One member of the CFPC's Section of Residents, with a preference for the MNCC rep
- One member at large with expertise in the subject, with a preference for a DFM Chair
- Other experts to be invited as appropriate to the Working Group's deliverables

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