

An Approach to Maternity Care Education For Canadian Family Medicine Residents

A Discussion Paper of the Maternity and Newborn Care Committee

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Rationale for this document

Competence in maternity and newborn care is a prerequisite for Certification in Family Medicine in Canada. . In its Standards for the Accreditation of Residency Training Programs in Family Medicine, The College of Family Physicians of Canada (CFPC) requires that all family medicine residents, within their continuity experience, have the opportunity to follow some (preferably six or more) pregnant women to term and through labour and delivery. Residents must have an adequate experience in maternity care, including intrapartum care and birth, preferably in settings involving family physicians.¹ However, residency programmes are being challenged by situations where:

- fewer and fewer faculty are role models who provide intrapartum care;
- competition exists for appropriate clinical placements in maternity care; and,
- the majority of family residents entering the programme do not plan to provide intrapartum care upon graduation.

It is hoped that this document will support the development of maternity and newborn training experiences that offer the next generation of family physicians opportunities and the motivation to become competent maternity care providers who also include the very important aspects of intrapartum maternity care in their practices.

The Maternity and Newborn Care Committee (MNCC) of the CFPC supports the College's accreditation standards for maternity care. This document has been written as a resource to the College's Accreditation Committee and to the various Family Medicine training programmes seeking to enhance learning experiences for family medicine residents and to maintain a focus on the development of skills in a minimum set of core competencies.

Introduction

Family physicians act as an important resource to their communities in the provision of maternity care. Family physicians continue to provide care for approximately 27.7 % of births in Canada². Yet Canada faces a crisis in maternity care, as declining numbers of professionals, including family physicians, are choosing to provide this care. The 2004 National Physician Survey indicates that only 13% of responding family physicians provide intrapartum care. However, 47% provide prenatal care, 43% provide postpartum care and 50% provide newborn care.³ Therefore, all future family physicians who aspire to obtain certification should attain competencies in many core areas including maternity care. Without this broad level of skills, we cannot assure Canadians that family physicians will continue to cover the spectrum of services that women need.

We know that trainees develop their attitudes and values related to maternity care in many ways. For some, these attitudes are already formed before residency training, some arrive already committed to being maternity care providers upon graduation; others are determined not to have this element in their eventual practice. Many enter their training programs undecided. It may be possible to increase the number of family medicine trainees interested in maternity care by ensuring that undergraduate medical students have exposure to different models of family medicine maternity care.

However, in general, among incoming family medicine residents there is waning interest in maternity care which continues to decline over the two year residency program. Godwin et al followed a cohort of Ontario family medicine residents from entry into residency when 52% expressed the intention to practice intrapartum care to 2 years in practice when only 16% were actually attending births.⁴ Despite this trend, second year residents responding to the National

Physicians' Survey in 2004 indicated that 45% of the women and 27% of the men intended to include intrapartum care in their practices.²

There is some evidence that changing the residency curriculum in maternity care can increase the number of graduates who provide pregnancy care. Helton et al were able to increase the number of residency graduates including any pregnancy care in their first practice after graduation from 27.5% to 52% after an extensive revamping of their family medicine obstetrics program.⁵ They based the changes in their program on Taylor and Hansen's "essential" characteristics for successful obstetrics training in family practice residencies. These include, but are not limited to, family medicine faculty who are competent providers of maternity care, adequate obstetrical volume, emphasis on the longitudinal experience of maternity care and a family medicine department which credentials its own members (including community physicians) in obstetrical care.⁶

Trainees who are undecided and trainees who are planning to provide maternity care may benefit from additional training resources during their residency. Some, particularly those who aspire to rural practice, might need advanced skills (including doing cesarean sections) offered as part of a third year of training.

Methodology:

A literature search was conducted using "family medicine", "family practice", "obstetrics", "training" and "teaching" as mesh headings. In addition, in 2000, the MNCC surveyed existing training programs. While it was clear that some excellent models exist in Canada, it was not clear that all programs could ensure that all trainees develop the basic competencies in maternity care, as required by College accreditation standards. Many programs did not have a

local curriculum, a didactic program, procedural volume requirements, or systematic reviews of residents' experiences using logbooks and/or other methodologies. While such features are not required, they are invaluable in monitoring and ensuring adequate training across all programs. Finally, an expert panel consisting of family medicine maternity care providers and teachers from different parts of Canada developed consensus regarding the recommendations below.

Recommendations:

The MNCC proposes a model of maternity care training based on three elements:

1. Learning opportunities
 - (a) Family Medicine rotations
 - (b) Maternity care rotations (which could be with Departments of Family Medicine or Obstetrics)
 - (c) Obstetrics and neonatal life support courses
 - (d) Seminars and other teaching sessions
2. Formative evaluations
3. Core competencies in Family Medicine Maternity Care

1. LEARNING OPPORTUNITIES

(a) Family medicine rotations

The purpose of the maternity care exposure during the family medicine rotation is to model and teach normative and sustainable maternity care and to ensure its integration into everyday family practice. Maternity care should be taught in the family practice setting in both academic teaching units and community-based practices. A strong core faculty

composed of members from the Department of Family Medicine providing maternity care, is critical.

It is important to develop on-call methods and groups that can demonstrate and model how maternity practice can be structured to accommodate the other demands of a practice as well as personal, family and social life. This is only possible to model when the Department of Family Medicine has sufficient faculty members providing maternity care to have a sustainable call schedule. In departments with fewer maternity care faculty members, support systems involving cross-coverage with community-based preceptors is an acceptable alternative. Faculty providing maternity care should not be penalized by call obligations which exceed that expected of their colleagues who do not provide intrapartum care.

To serve as models for the residents, all Departments of Family Medicine should have strategies to provide appropriate training in maternal and newborn care, including intrapartum care as part of the family medicine rotation. A number of sustainable models exist that can address provincial and local conditions, including the involvement of role model preceptors who should be supported by the Department of Family Medicine. The provision of maternity and newborn care should rank high among those activities that are clinically, organizationally, and academically rewarded.

(b) Maternity care rotations

Residents should train in maternity care environments where family physicians are treated as a valued resource. Hospital privileges for maternity care should be granted within the hospital department of Family Medicine with credentials for procedures being granted according to training and experience, not simply by professional category (e.g. obstetrician

vs. family physician).⁷ Family Medicine Departments should endeavor to remediate settings that are not supportive of family medicine. Family medicine residents should not be required to spend time in maternity care settings that are not supportive of family physicians.

Exposure to an adequate volume of maternity care and procedural experiences is essential to develop an appropriate level of knowledge and skills. Approximate numbers are suggested in this document for some of these experiences.

The length of time a resident spends on maternity care rotations should depend on the nature of the experience including the number of call days which contribute to these requirements. However, training sites should account for local factors such as lower birth numbers, the presence of other learners (e.g. undergraduate medical students, family medicine and obstetrics / gynecology residents) and the commitment of the labour and delivery team to the education and involvement of family medicine residents. Many programs will require a minimum of 2 months of obstetrics rotation over the 2-year residency to ensure an adequate educational experience. In some settings an exposure to midwifery practices may be beneficial.

Outpatient maternity care should be modeled during family medicine rotations as well as obstetrics rotations. Special attention must be paid to providing neonatal care and resuscitation experience during the obstetrics rotation if not available elsewhere.

(c) Obstetrics and neonatal life support programs

Completing CFPC-approved obstetrics life support courses, such as Advanced Life Support in Obstetrics (ALSO) or Advances in Labour and Risk Management (ALARM) and the Neonatal Resuscitation Program (NRP), is a good way for residents to develop the

confidence and skills for dealing with important but less common maternity care situations. Hospitals involved in the MOREob course should endeavor to include Family Medicine residents in the program. The MNCC recognizes that College's recent endorsement of the ACoRN program and supports the ongoing development of this as an educational resource for the Family Medicine residents and faculty.

2. FORMATIVE EVALUATIONS

Each candidate should be evaluated during both family medicine and maternity care rotations for competence in both knowledge and procedural elements of the curriculum. A logbook would be helpful for following procedural exposure. Minimum obstetrical training standards should be set by each Department of Family Medicine, below which residents would not be considered as completing their residency program or as eligible to sit the CFPC certification examination. Opportunities for remedial training or additional clinical experience should be made available to residents who lack sufficient knowledge or adequate exposure to required procedures.

3. CORE COMPETENCIES IN FAMILY MEDICINE MATERNITY CARE

The basic and minimum scope for which any family practice trainee should be able to demonstrate competence in obstetrics is as follows. The numbers in parentheses are the minimum number of cases which the expert panel recommends for learners to develop competence. Items without numbers require a competent approach only and not necessarily experience. Some learners will develop competence at lower numbers – some will require more. As a separate issue, learners who have an interest in maternity care may benefit from additional resources and experience above these numbers to become more confident. The length of time spent in an obstetrics rotation should be structured to meet these goals.

(a) The patient-doctor relationship

- Provision of support to the woman and her family throughout pregnancy, birth and the postpartum period. The principles of patient centred care should be maintained.
- Understanding and applying of the principles of informed decision-making

(b) The health care team

- Understanding of the roles of all health care providers in the team, including referral/consultation and hospital maternal/newborn care planning and policy-making
- Ability to work collaboratively in different models of maternity care

(c) The pregnancy

- Visit for pre-pregnancy planning
- Knowledge of evidence based guidelines for prenatal care (including antenatal screening)
- Initial prenatal visit history, physical, counseling and laboratory investigations
- History, physical examination, laboratory monitoring and counseling throughout pregnancy
- Management of various problems of pregnancy (e.g. IUGR, gestational hypertension, maternal infections, gestational diabetes, APH, PROM etc)
- Care of preferably six or more women followed through pregnancy and birth

(d) Normal labour and delivery

- Knowledge of evidence based guidelines for intrapartum care
- Vaginal examination for cervical dilation, fetal station and position
- Spontaneous term singleton vertex labour and delivery (25)

- Assessment for rupture of membranes and amniotomy
- Induction for postdates or ruptured membranes at term without evidence of fetal compromise (5)
- Basic fetal surveillance including intermittent auscultation and electronic fetal monitoring, including scalp electrode placement
- Performance of episiotomy when indicated, assessment of degree of perineal tearing and repair

(e) Management of common intrapartum problems

- Management of dystocia by nonpharmacologic and pharmacologic means, including oxytocin
- Management of shoulder dystocia
- Management of various intrapartum problems (e.g. recognition of preterm labour, fever, infection, non-reassuring fetal status, manual removal of placenta)
- Outlet vacuum or forceps (4)
- Repair of laceration or episiotomy including third degree lacerations
- Management of postpartum hemorrhage
- Vaginal birth after cesarean section
- Emergency vaginal breech

(f) Basic postpartum care

- Breastfeeding initiation
- Recognition and management of problems of postpartum period including delayed postpartum hemorrhage, postpartum depression etc

(g) Care of the newborn

- Examination and care of newborns, including breast-feeding issues
- Basic neonatal resuscitation, including intubation and management of meconium
- Common problems in the normal newborn

Closing comments

The MNCC believes that Departments of Family Medicine should plan maternity and newborn care training experiences for their residents that will offer excellent opportunities for them to develop into competent and confident maternity care providers. With this comes renewed hope that more of Canada's new family physicians will elect to incorporate maternity care into their future practices.

The committee recommends that the above recommendations be approved by the College and be given serious consideration in training programs across the country. The committee welcomes dialogue, feedback and debate.

End Notes:

¹ The College of Family Physicians of Canada. Standards for the Accreditation of Residency Training Programs March 2000.

² National Grouping System Categories Report, Canada. National Physician Database, Canadian Institute for Health Information. Available from: http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=AR_18_E . [cited Aug 15, 2005].

³ National Physician Survey 2004. Available at <http://www.cfpc.ca/nps>. Accessed January 6, 2006

⁴ Godwin M, Hodgetts G, Seguin R, MacDonald S. The Ontario Family Medicine Residents' Cohort study: factors affecting residents' decisions to practice obstetrics. CMAJ 2002; 166(2):179-184.

⁵ Helton M, Skinner B, Denniston C,. A maternal and Child Health Curriculum for Family Practice Residents: Results of an Intervention at the University of North Carolina. Fam Med 2003;35(3):174-180.

⁶ Taylor HA, Hansen GH. Perceived characteristics of successful family practice residency maternity care training programs. Fam Med 1997;29(10):7098-14.

⁷ Goluboff S, Reynolds L, Klein M, Handfield-Jones R, Privileging and consultation in maternity and newborn care. Can Fam Physician 2000;46:1716-8