

Ontario Maternity Care Expert Panel Appendix A – Recommendations

The Ontario Maternity Care Expert Panel prepared two sets of recommendations with this report, 1) a one-page set of summary recommendations and 2) a detailed list of recommendations by theme.

The detailed recommendations on Women’s Input and Access to Care and Public Education and Promotion are contained throughout the report. The other themes correspond to the major sections of the report: Maternity Care Strategy; Research, Data and Evaluation; Health Human Resources Planning; Education; Models; Regulation; Liability Issues and Accountability and Funding.

Table of Contents

SUMMARY OF OMCEP RECOMMENDATIONS:.....	145
WOMEN’S INPUT AND ACCESS TO CARE	146
PUBLIC EDUCATION AND PROMOTION	149
MATERNITY CARE STRATEGY.....	150
RESEARCH, DATA INTEGRATION AND EVALUATION	153
HEALTH HUMAN RESOURCES PLANNING.....	154
EDUCATION: INTER-PROFESSIONAL, PREPARATORY, POSTGRADUATE, CLINICAL AND CONTINUING	156
MATERNITY CARE MODELS.....	159
REGULATION.....	160
LIABILITY PROTECTION	161
PROGRAM ACCOUNTABILITY AND PROVIDER AND INSTITUTIONAL FUNDING	162

Summary of OMCEP Recommendations:

The Ontario Maternity Care Expert Panel recommends that:

The Premier of Ontario direct the ministries of Health and Long-Term Care, Children and Youth Services, Health Promotion, Training Colleges and Universities and Attorney General to work together with professional organizations, regulatory bodies and educational institutions to take immediate action to address the impending maternal-newborn care crisis and ensure that women and families receive access to essential, high-quality, effective and sustainable maternity care services in Ontario by:

1. Increasing the number of maternity care providers and declaring a moratorium on maternity care program closures in communities that have sufficient health human resources to maintain safe services.
2. Immediately establishing an ongoing provincial maternity care program led by MOHLTC and regional networks of care providers and be responsible for:
 - Creating a sustainable maternal and newborn care plan for Ontario with full financial responsibility and accountability;
 - Integration of that plan across ministries, all regions and services;
 - Alignment of the maternity care plan with the government's transformation plan with maternity care as an integral part of primary care;
 - Ongoing performance measurement to ensure access to quality services.
3. Incorporating women's input into maternity care at all levels from informed decision-making about their own care to local, regional and provincial service planning policy.
4. Ensuring timely and equitable access to quality maternity care by committing to:
 - Primary maternity care delivered close to home;
 - Services that are responsive to the needs of diverse and vulnerable populations;
 - Woman and family-centred models of care;
 - Regionally coordinated access to high-risk care.
5. Create and undertake public and professional education campaigns to support a sustainable maternity care system and promote pregnancy and birth as a normal physiologic process with access to care for complications, as needed.
6. Attract, support and retain maternity care providers by developing a system that values and respects all provider groups, including midwives, nurses and physicians through harmonization of regulation and liability mechanisms and creation of complementary funding schemes.
7. Remove barriers to care and create structures that support:
 - The effective use of all care providers to their full scopes of practice;
 - Collaboration amongst professionals;
 - Innovative inter-professional models of education and clinical care founded on evidence-based guidelines and practices.

Women's Input and Access to Care

The Ontario Maternity Care Expert Panel recommends that the maternity care system:

1. Incorporate women's input into maternity care at all levels from informed decision making about their own care through local and regional service planning to provincial policy setting. Input should be specifically sought from women who encounter systemic barriers to the maternity system. Groups requiring specific consideration include:
 - aboriginal women
 - women in shelters and homeless women
 - uninsured women
 - abused women
 - immigrant women
 - women with language barriers
 - women of colour
 - disabled women
 - rural and remote women
 - single women
 - young women
2. That maternity care services and policy be delivered according to the following principles:

Woman and Family Centred Care

- Care across the continuum of maternity and newborn care
- Equitable access to "Care as Close to Home as Possible"
- Promotion of pregnancy and birth as a normal physiological process
- Regional coordination of services and access to high-risk care
- Woman and family centred care including:
 - Empowerment and participation
 - Informed choice
 - Choice of birthplace
 - Quality care to diverse and vulnerable populations
 - Continuity of care

Principles of Service Provision

- Valuing maternity care providers
- Collaboration – inter-professional, respectful and seamless
- Provider preparation, competence and confidence

Principles of Stewardship and Coordination

- Effective coordination of services
 - Alignment of the system with national and international determinants of health
 - Maternity care as part of primary care
 - Continuous evaluation and improvement to ensure quality and safety
 - Financial responsibility and accountability
3. That LHINs, regional networks and institutions work together to ensure women and families in Ontario's LHINs 1-12 can access primary maternity care services including pre-conception counselling, prenatal care, antenatal education, lactation support, newborn care and bereavement services in the community where they live and, in LHINs 13 and 14, within a one hour drive from home. Resources must be made available to ensure that women can begin primary care prenatal visits in their own communities as soon as they self refer for care.
 4. That LHINs, regional networks and institutions work together to provide women and families in Ontario access to primary institutional birth services in their own communities with greater than 20 births per year and, as part of regional plans, access to secondary and tertiary level institutional birth services as close to home as possible according to provincially accountable plans.
 5. That LHINs, regional networks and institutions work together to develop and distribute health human resources for primary maternity care to end the removal of pregnant women from communities to give birth unless individual complications require transfer or community volumes mean intrapartum care is not feasible. Where evacuation to distant birth services remains necessary because local services are not yet feasible or due to complications, funding supplements should be made available for accompanying family to travel, obtain meals and childcare in the referral community, as required.
 6. That LHINs, regional networks and institutions work together to fund and support the regional planning of maternal fetal medicine, anaesthesia, complex neonatal services and perinatal psychiatric services so that, when they are needed, these specialized services are available as close to home as possible.
 7. That MOHLTC expand funding for outreach maternity care programs such as the Fetal Alert Network and others that provide telemedical opportunities for technology to extend specialist expertise among communities with limited resources.
 8. That LHINs, regional networks and institutions work together to make sufficient resources available on a regional level to enable women (and/or their newborns) to be transferred back to the appropriate level of services, as required, and back to their own communities as soon as possible after care for complications ceases to be required.

9. That 911 Emergency Medical Service (EMS) response be separate from inter-facility transport. Funding a system for inter-facility transport would ensure access to EMS vehicles for pre-hospital emergencies.
10. To provide for the differing transport needs for the Greater Toronto Area and the rest of Ontario, a distinct transport system should be developed for the GTA.

Public Education and Promotion

The Ontario Maternity Care Expert Panel recommends that:

1. That the Ministry of Health and Long Term Care and the Ministry of Health Promotion work together to fund and lead a joint public health/community health/hospital campaign aimed at maternity care providers, educators, hospitals, professional associations, regulatory colleges, insurers and the public. The campaign's objectives would include:
 - promoting birth as a normal physiological process;
 - providing information to all pregnant women and families on local care provider and service options so they can make informed choices about provider, service and birth place;
 - providing educational information to providers on the scope and role of all maternity care providers;
 - providing improved access to information on lifestyle choices for healthy women and families of childbearing age;
 - providing improved access to information on high-risk medical services, for women and families in need of these services;
 - highlighting issues such as evidence-based care options, professional retention, cost-effectiveness, collaboration and opportunities for inter-professional practise;
 - promoting maternity care to young Ontarians and health science program candidates as a positive career choice;
 - promoting among maternity care providers, insurers and the public an understanding and acceptance of the small inherent clinical risk associated with birth and evidence that supports lowered incidence of claims, rather than heightened incidence, when there is good communication and collaborative, respectful practice by care teams.

Maternity Care Strategy

The Ontario Maternity Care Expert Panel recommends:

1. That the Government of Ontario establish an Office of Maternal Newborn Health or equivalent mechanism, led by the Ministry of Health and Long-Term Care with expertise, resources and authority to link health divisions and other ministries to provide stewardship for maternity care in Ontario.
2. The Panel recommends the Office of Maternal Newborn Health be given a stewardship role that comprises:
 - Using population health principles to develop and maintain a provincial framework for the provision of maternity care services and work within the framework to approve regional plans
 - providing ongoing strategic direction for maternity services
 - setting priorities and targets for maternity care at the provincial level
 - improving the quality and consistency of maternity care across the province
 - harmonizing educational, legislative, regulatory, funding and liability insurance systems for maternity care
 - monitoring maternity care services across the province, and producing an annual public report on the performance of the maternity system
 - working with Local Health Integration Networks, provincial programs and stakeholders to ensure accountability and value for maternity care resources and optimal functioning of all aspects of the system
 - working with federal, provincial and territorial partners to keep in step with evolving strategies for maternity care, primary health care, women's health and newborn health.
4. OMCEP recommends each regional network reflect the composition of provincial maternity care programs including full inter-professional primary and acute care representation and women (recipients of maternity care services). Sufficient funding and provincial support should provide each regional network with the capacity to coordinate maternity care services and collect, analyse and interpret local and provincial data and to facilitate continuous improvement. When implemented, the Office of Maternal Newborn Health would increasingly depend on regional networks and LHINs to conduct local and regional planning and funding activities as the province advances its New Directions strategy.
5. That to enable consistent planning, development, implementation and evaluation of the system, government define maternity care as: the continuum of care that includes primary and specialized services provided to a woman from pre-conception, through pregnancy, labour, birth and to mother and newborn until 6 weeks to 2 months after birth.
6. That the Top Priorities of the Maternity Care Strategy should be:
 - Stabilize the maternity care system while the province develops a strategy for future maternity care service developments

- Incorporate women and families in the planning process at all levels
 - Conduct a consumer and health care provider information campaign about available maternity care services and promote physiologic pregnancy, labour and birth
 - Develop a minimum standard set of local, regional and provincially available maternity services
 - Expand innovative service delivery models
 - Conduct HR planning - including population health needs-based planning, recruitment, retention and succession for the maternity care sector
 - Maximize capacity of education programs including: require all medical, midwifery and nursing programs to offer inter-professional maternity care education opportunities; effective recruitment into family practice maternity care and obstetric residency positions; and increase midwife entrant class sizes to meet demand for services
 - Equitably fund and expand clinical placements for midwifery, family medicine, nursing and obstetrics, including residency and fellowship positions
 - Create complementary inter-professional funding schemes and harmonize regulatory and liability protection systems
 - Establish a provincial integration task force to address current barriers to inter-professional care
 - Build LHIN, regional network public health unit advisory capacity to ensure delivery of population-based maternity care services and sector oversight
 - Integrate maternity care data across divisions and ministries
 - Increase accountability of service providers, agencies, programs
7. That an Integration Task Force address barriers to inter-professional care among maternity care teams in communities. Specifically, the group would provide operational support and educational to assist communities to maximize the integration and utilisation of midwifery and nurse practitioner scopes and services and to create interdisciplinary maternity care models. In addition, the Task Force would assist hospitals to:
- alleviate credentialing restrictions on midwifery hospital privileges
 - alleviate restrictions on scopes of practice for nurse practitioners and midwives including seamless consultation and referral with specialists
 - establish and improve communication and dispute resolution processes
 - advise hospitals on the establishment of Departments of Midwifery and Professional Advisory Committees
 - advise hospitals on liability concerns related to inter-professional care and any concerns about the responsibility associated with being the ‘most responsible care provider’

8. OMCEP recommends the Office of Maternal and Newborn Health be given a mandate to support internationally prepared maternity care providers (including physicians, midwives and nurses) to integrate into the maternity care system and maximize their contribution.
9. That the Office of Maternal and Newborn Health launch its approach for strategic, integrated population-based health planning by funding a provincial conference and consensus-building session to bring together key representatives in the evolving maternity system. The event will include members of the Office of Maternal and Newborn Health, regional and provincial structures and key advisors including: maternity care providers across all professions, existing and new regional perinatal partnerships, networks and stakeholder groups, government maternity care program representatives and LHIN representatives.
10. That, through the Office, the Government of Ontario identify, facilitate, support and maintain linkages with federal, provincial and territorial partners in order to keep in step with evolving strategies for maternity care, primary health care, women's health and newborn health.

Research, Data Integration and Evaluation

The Ontario Maternity Care Expert Panel recommends:

Research

1. That MOHLTC fund the Office of Maternal and Newborn Health to manage an ongoing grant for research into innovation and evaluation in the following areas of maternity care:
 - model development and implementation
 - inter-professional preparatory and continuing undergraduate and postgraduate education
 - rural and remote care
 - research and evaluation in maternity care
 - costing studies/cost analysis of maternity care
 - knowledge transfer and evidence dissemination
 - care to diverse and vulnerable groups with access barriers
 - models to promote stabilisation of the maternity care workforce

Data Integration

2. That the Attorney General remove systemic disincentives to birth registration to improve the completeness of Ontario's vital statistics data thereby improving the reliability of this important source of planning and evaluation information for maternity care.
3. That MOHLTC fund and coordinate the development of maternity care information to provide comprehensive decision support to all the ministry and external programs and agencies contributing to and planning for the maternity care system.
4. That as a short-term strategy, the MOHLTC expedite the linkage of existing sources of maternity care data to provide a first public provincial report on maternity care using 2005-06 data.

Evaluation

5. That the proposed maternity care strategy include a survey of women's satisfaction of the maternity care system which should be published in an annual public report.
6. That an ongoing evaluation plan be developed and implemented by the proposed Office of Maternal and Newborn Health using the performance measures and outcomes listed in Appendix E of this report.

Health Human Resources Planning

The Ontario Maternity Care Expert Panel recommends:

1. That one of the priorities of the provincial maternity care strategy be to create mechanisms to monitor and anticipate the population requirements of maternity care on an ongoing basis to achieve targets for an appropriate supply, mix and distribution of health human resources to meet those needs.
2. As part of a maternity care health human resources strategy, MTCU and MOHLTC work with all undergraduate education programs in medicine, midwifery and nursing to create a sustainable pool of providers.
3. That MOHLTC health human resources planning should aim to create a mix of intrapartum maternity care providers and to recover a sustainable pool of low-risk care providers.
4. In addition to the current expansion of medical and nursing schools, IMG positions and the designation of obstetrics and gynecology and family medicine maternity care as priority programs, the ministry should expand and support midwifery and maternity care nursing under the government's platform to improve access to primary care providers.
5. That all medical schools promote family practice maternity care and obstetrics as viable career choices.
6. That MTCU and MOHLTC support midwifery education programs to expand to meet demand as per the proposal invited by MCTU. Expansion of the midwifery programs should include advanced entry access for appropriately qualified nurses and increased access for aboriginal women. In addition, ways to maximize the capacity of the International Midwifery Pre-registration Program should be explored.
7. That all nursing schools promote maternity care and obstetrics as a viable specialty for new/continuing nurses and nurse practitioners and increase the educational program capacity of nursing schools with the goal to producing a stable pool of maternity care nurses. Collection of accurate data on current maternity care nursing human resources trends and determining appropriate target numbers should be a top priority of a provincial unit.
8. That all medical schools promote obstetric anaesthesia with the goal to producing a stable pool of anaesthesiologists and family physician anaesthetists. Collection of accurate data on current maternity care anaesthesia human resources and trends and determining appropriate target numbers should be a top priority of a provincial unit.
9. That medical schools promote paediatrics with the goal to producing a stable pool of paediatricians. Projections for paediatricians should factor in the specific needs of the newborn population of the total specialty requirements and should similarly support the role of family physicians in newborn care as OMCEP has for family physicians in intrapartum care.

10. That the MOHLTC redefine its concept of ‘under-serviced area’ to include those communities that have insufficient prenatal, intrapartum (medical, nursing, midwifery), obstetrical anaesthesia and postnatal (including well woman/newborn and paediatric) maternity care providers and provide those areas with incentives to recruit sufficient human resources. This definition needs to take into account degrees of rurality including a designation specific to Northern LHIN 13 and 14.
11. That MOHLTC and educational institutions support research into effective recruitment and retention models for maternity care.
12. That, as part of a maternity care human resources planning strategy, the MOHLTC and Ministry of Citizenship create options for Ontario and/or international candidates to re-skill and return to maternity care practice.
13. That, as part of a provincial retention strategy for existing maternity care professionals, institutions and providers ensure that all caregiver groups are valued as part of the caregiver team and have working conditions that recognize the stresses of on call care. To this end, the maternity care strategy should develop specific direction and expectations of hospitals to provide supports to all members of on-call maternity care professional groups.
14. That regions, LHINs and institution planning include a forecast regarding existing provider’s plans including leaves, retirement and relocation to inform future maternity care provider needs and create succession plans.

Education: Inter-professional, Preparatory, Postgraduate, Clinical and Continuing

The Ontario Maternity Care Expert Panel recommends:

1. That part of an ongoing maternity care strategy advisory group be a network of medical, midwifery and nursing health science programs charged with:
 - promoting intrapartum maternity care as a rewarding and valued career choice
 - maximizing the capacity of all programs to produce intrapartum maternity care providers as per OMCEP's recommendations
 - coordinating their activities with a maternity care human resource plan
 - creating a strategy for inter-institutional cooperation to provide inter-professional maternity care education
 - establishing a clinical teaching registry to maximize utilization of clinical placements and reduce competition between programs and faculties for limited spots
2. That all schools and faculties of medicine, midwifery and nursing:
 - provide maternity care education and maternity clinical practice that includes prenatal, intrapartum and post partum experiences
 - expose learners to primary maternity health care as well as high-risk care in tertiary facilities
 - provide early exposure of all students to normal prenatal/intrapartum/post partum maternity care as part of their curriculum
 - provide role modelling for maternity care as a rewarding and valued career choice
 - provide education which fosters confidence and competence in collaboration between professions, scopes of practice of all involved in maternity care and about multi and inter-professional models of care
 - incorporate input and evaluation from women, families and learners in the design and delivery of academic and clinical curricula
 - develop and deliver curricula on social, cultural and geographic differences that affect maternity care
 - provide education based on the OMCEP Principles of Maternity Care
 - deliver education specific to rural and remote care
3. That to ensure the sustainability of existing specialized service programs, MTCU, MOHLTC and medical programs ensure full funding and incentives to learners and teachers to support an appropriate supply of post-graduate maternal-fetal medicine specialists, obstetrical anaesthetists (including family physician anaesthetists), paediatricians and specialized perinatal nursing programs to meet the needs of Ontarians.

4. That MTCU support faculty leaders in midwifery and nursing to work together, with their respective regulatory bodies, and medical and hospital colleagues to create greater mobility between the nursing and midwifery professions. Approaches should be considered that address:
 - advanced entry/compressed programs for candidates with prior learning
 - dual registration considerations
 - options for clinical fellowships
 - options for research, graduate study and academic leadership
 - support for new models of practice involving nursing and midwifery collaboration
5. That the Office of Maternal and Child Health maintain clinical education agreements with every institution and community setting so that learners have access to the maximum number of maternity clinical experiences.
6. That to maximize Ontario's resource of experienced intrapartum teachers and mentors, MTCU and MOHLTC create an equitable system to remunerate maternity care providers to act as supervisors/mentors in the community for clinical placements and to facilitate inter-professional education.
7. That government offer incentives for providers to pursue educational opportunities to return to intrapartum clinical practice and/or to provide specialized services such as obstetrical anaesthesia, general surgery (for Caesarean section) prenatal care and newborn care.
8. That the Office of Maternal Newborn Health and the medical, midwifery and nursing programs work together to prioritize rural and remote maternity care education and clinical teaching by:
 - undertaking regional recruitment of undergraduate and graduate students agreeing to study maternity care
 - developing a standardized educational program for rural and remote maternity care
 - creating student placements in rural/remote maternity care, at core and elective levels, for medical, nursing and midwifery students
 - increasing the number of 3rd year medical/family practice placements in rural, small community and remote settings
 - offering incentives (or direct funding) to experienced maternity care providers to teach in rural and remote hospitals and clinic settings, and to act as supervisors/mentors for clinical placements
 - providing funding/grants/scholarships to students for placements in rural and remote areas
9. That LHINs and regions make available the necessary resources to low-volume hospitals to enable them to provide continuing education opportunities for staff to maintain intrapartum skills.

10. That MOHLTC fund health science programs to work with hospitals and regions to expand the use of information technology systems to support continuing education.
11. That MOHLTC direct and fund hospitals to allocate resources for continuing education for all providers, including but not limited to:
 - providing a lead local maternity care educator position, such as a perinatal nurse or midwife clinical leader
 - emergency skills training, including ALARM, MORE^{OB}, ALSO, Midwifery Emergency Skills, Neonatal Resuscitation Programs, ACORN
 - lab and imaging services for maternity care
 - public health maternity care
 - social work services
 - prenatal, postnatal and newborn care educators
 - lactation support services
 - bereavement services
 - Caesarean capacity
 - anaesthesia capacity

Maternity Care Models

The Ontario Maternity Care Expert Panel recommends:

1. That MOHLTC sustain and support existing and innovative models of maternity practice that are woman-centred, locally supported, developed and accountable, maximize scope of practice of care providers, and provide comprehensive maternity care as close to home as possible.
2. That hospitals, community agencies and providers coordinate their primary and high-risk services to ensure equitable access to women and families across the continuum of care and report gaps to the perinatal/LHIN region. This will require all agencies to collaborate to ensure seamless access to care for women and to link acute and tertiary maternal-fetal and neonatal services.
3. That MOHLTC support hospitals and maternity care providers to design maternity care models that can respond flexibly to the diverse needs of Aboriginal, immigrant and vulnerable communities within Ontario's population respecting that birth is a culturally celebrated event.
4. That MOHLTC establish and evaluate Centres of Excellence for Normal Birth, linked as clinical teaching sites with Academic Health Science Centres, which could include birth centres, units in Level 1 hospitals and collaborative models in Level II and III hospitals. These centres would facilitate interdisciplinary education and research to support low intervention models of care.
5. That MOHLTC work with regulatory bodies, professional associations and hospitals to remove barriers to integrated models of maternity care and to allow all maternity care providers to provide full scope of practice and reduce barriers to quality care.
6. That MOHLTC fund and reinvigorate the mandate of Public Health to re-establish itself as the lead for public health promotion, prenatal education, and newborn and women's health programs in Ontario.

Regulation

The Ontario Maternity Care Expert Panel recommends the Colleges of Midwives, Nurses and Physicians work in partnership with MOHLTC to implement the following OMCEP recommendations:

1. That government adopt a co-ordinated, omnibus approach to legislative/regulatory change and maintenance of the maternity care system, to provide women and families with the highest standard of maternity care and to provide options for inter-professional care. This approach is recommended to ensure:
 - legislation and regulation support the provincial maternity care strategy on an ongoing basis
 - Ontarians have access to and choice of all available maternity care providers and both established and innovative models of care
 - quality services continue to evolve according to the best available evidence
 - maternity care providers of all professions can share decision-making at the clinical, institutional and regional levels regarding clinical care, funding, regulation and liability
2. That the MOHLTC mandate the proposed new Office of Maternal and Newborn Health to work in partnership with regulatory colleges and ministry staff to deliver a comprehensive list of legislative and regulatory revisions within 6-12 months, to be implemented during the next legislative session. These revisions shall include amendments to:
 - the Public Hospitals Act to permit inter-professional participation in hospital governance and credentialing
 - regulation to enable the scope of practice of midwifery to be harmonized with other provinces, including expanded pharmacopoeia and use of classification or indication (rather than individual named drugs), newborn intubation, fetal scalp blood sample testing, venous blood sampling on newborns, performing necessary prenatal blood tests on biological fathers (e.g. Rh status)
 - midwifery and nursing regulations to permit extended roles and skills, e.g. for Caesarean section first assist role in rural and remote communities and, for midwives, vacuum assisted delivery
3. That the Office of Maternal and Newborn Health be mandated to investigate and make periodic recommendations to the Government on legislation and regulations that encourage best practice and/or eliminate barriers to collaborative, high quality maternity care, as evidenced by the best available research.

Liability Protection

The Ontario Maternity Care Expert Panel recommends:

1. That the Office of Maternal and Newborn Health to engage national insurers and provincial stakeholders in the development of a maternity care risk management strategy as part of its provincial maternity care plan. This strategy would promote an approach which puts perinatal risks in perspective as “normal life events with associated uncertainties”³⁹ and promote realistic expectations regarding the inherent clinical risk associated with birth and the infrequent but potentially serious consequences. The strategy would support practitioners of different professions to work together to provide optimal care and addresses the incidence of claims and their effects on families, health care providers, institutions and future members of maternity care professions.
2. That the full costs of professional liability insurance premiums be funded by MOHLTC as an incentive to maternity care providers of all professions to remain in practice.
3. That the Office of Maternal and Newborn Health explore new mechanisms for inter-professional liability coverage, alternative dispute resolution and public protection that eliminate the current competition that exists between insurers, including the Canadian Medical Protective Association (CMPA), the Healthcare Insurance Reciprocal of Canada (HIROC) and the Canadian Nurses Protective Society (CNPS) and others and reduce the length of time and expense spent on pursuing claims.
4. That Government of Ontario fund the costs of caring for Ontarians with birth-related injuries, reducing the motivation for parents to sue maternity care providers to obtain this support.
5. That the Office of Maternal and Newborn Health establish regional risk management officers (safety officers) with expertise in clinical maternity care who work with maternity care providers to improve communication and risk management strategies as part of LHIN planning.
6. OMCEP commends professional stakeholders, the CMPA and CNPS, on the publication of a joint statement on collaborative care between Nurse Practitioners and Physicians.³⁴ and recommends the development and publication of a similar joint statement regarding collaborative care between physicians and midwives and other allied professionals where appropriate.
7. That the Office of Maternal and Newborn Health be mandated to engage the CMPA, HIROC and the CNPS at the national and provincial levels to create mechanisms for non-adversarial risk management approaches. These approaches would include: mediation strategies, support for providers who are undergoing claims, streamlined civil and disciplinary processes and support for families whose children require ongoing special care.
8. OMCEP endorses and recommends the implementation of team-based approaches to inter-professional risk management activities for all maternity care providers, such as developed by the MORE^{OB} program.

Program Accountability and Provider and Institutional Funding

The Ontario Maternity Care Expert Panel recommends:

1. That the maternity care system be sustained and adequately funded in accordance with an incentive-based strategy for primary maternity care services to Ontarians where they live and quality secondary and tertiary services as close to home as possible.
2. That the proposed Office of Maternal and Newborn Health receive financial reports from all the ministries and divisions that offer maternity care programs including education, service programs, provider remuneration and institutional funding so that systems for monitoring, evaluation and population-based planning can be developed as soon as possible.
3. That funding approvals to programs whose activity combines maternity care and other types of service delivery (including Public Health, Hospitals etc) will report on maternity expenditures as a separate part of their budgets and financial reports. To this end, the Office of Maternal and Newborn Health should be involved in LHIN budget development and format for regional maternity care plans to ensure a consistent report for maternity care allocations and expenditures.
4. That, to acknowledge the demands on maternity care providers to be accessible and provide a range of complex, high and low risk care, provider remuneration levels should be reoriented to the acuity of services being provided.
5. That compensation negotiation proposals for maternity care professional groups be reviewed with the Office of Maternal and Newborn Health prior to approval to ensure that new compensation schemes encourage stability, sustainability and equity in the maternity care system. Where the Office determines the provider funding mechanisms pose barriers to collaborative, inter-professional or effective maternity care, it must be mandated to work in conjunction with other ministry programs to develop and implement alternate payment methods and incentives, where appropriate, and to create complementary remuneration processes.
6. That physicians of all specialist groups receive fair compensation from the Ontario Health Insurance Plan or an alternate payment mechanism for direct consultations and assessments requested under the scopes of Registered Midwives and Nurse Practitioners.
7. That, as part of the mandate of the Office of Maternal and Newborn Health, the ministry support consideration of inter-professional roles for nurses and the review and adjustment of collective agreements, if required.
8. That the MOHLTC direct the Office to work with physician, midwife, and nurse remuneration programs to review the effectiveness of current incentive programs for maternity care and make recommendations to improve them based on the best available information on professional retention strategies. Incentives that could be uniquely suited to maternity care include those which support respect and collaboration between professionals, inter-professional models and continuing education to maintain competence and/or to extend scopes in under-serviced communities.

9. That as part of the funding the Office of Maternal and Newborn Health, MOHLTC approve a funding envelope for the development of a comprehensive decision support system that will monitor, evaluate and provide the requisite regular reports on the specified indicators of the maternity care system.
10. That MOHLTC fund the Office to incorporate the expertise available through emerging e-health initiatives to develop and implement electronic health systems that improve women's access to maternity care and improve communication by health care providers.
11. That, to encourage the timely and thorough registration of all live and stillbirths; allow for accurate monitoring and analysis of maternity care outcomes data; and provide better access for disadvantaged populations to insured newborn health services; the Attorney General's office work with municipalities to eliminate the fee for birth registration.
12. That the Government of Canada provide an incentive as part of the child tax benefit for first trimester prenatal care.

Ontario Maternity Care Expert Panel
Appendix B
Bibliography

1. Oral Questions: Hospital Funding [Mrs. Elizabeth Witmer (Kitchener-Waterloo) to Hon. George Smitherman (Minister of Health and Long-Term Care)]. Legislative Assembly of Ontario: Official Report of Debates 38th Parliament, Session 2 2005 Dec 5;LO28A.
2. Barriers and enabling factors task groups report. Enhancing Interdisciplinary Collaboration in Primary Health Care Initiative. 2005 Feb.
3. The pervading controversies of VBAC. SOGC Express Report 2005:4.
4. Should midwives be promoting and providing home birth? RCM Midwives 2005 Jul;8(7):321.
5. The future of maternity and newborn care in Canada: principles and recommendations. The Future of Maternity Care in Canada; London, Ontario; 2000 Nov 24-25.
6. Obstetric manual: Final report of the obstetric working group of the national health insurance board of the Netherlands [abridged]. Available from: <http://europe.obgyn.net/nederland>
7. Ontario Women's Health Status Report. Prepared for The Ontario Women's Health Council, 2002 Feb. Available from: <http://www.womenshealthcouncil.on.ca>
8. Hospital Report 2001: Acute Care. Canadian Institute for Health Information. Available from: www.cihi.ca
9. Deliveries in Ontario 1992/1993-1999/2000 [internal OMA document], 2001.
10. Ministry of Health and Long-Term Care Schedule of Benefits, April 1, 2001.
11. Health Canada. Family-centred maternity and newborn care: national guidelines. Ottawa: Minister of Public Works and Government Services; 2000.
12. National Childbirth Trust website: www.nctpregnancyandbabycare.com
13. PPPESO Niday Perinatal Database. Annual database of the Perinatal Partnership Program of Eastern and Southeastern Ontario, 2001.

14. Giving birth in Canada: Providers of maternity and infant care. Canadian Institute for Health Information, 2004.
15. Laying the foundation for change: A progress report on Ontario's health human resources initiatives. Ontario; 2005 Dec.
16. Canada's health care providers: 2005 Chartbook. Canadian Institute for Health Information; 2005.
17. Supply and utilization of general practitioner and family physician services in Ontario. ICES Investigative Report. 2005 Aug.
18. Access to midwifery profession in Ontario. Backgrounder for Ontario Ministry of Training, Colleges, and Universities. 2005 Jul.
19. Alberta Perinatal Health Program. Website: <http://www.aphp.ca>
20. British Columbia Reproductive Care Program. Website: <http://www.rcp.gov.bc.ca>
21. Reproductive Care Program of Nova Scotia. Website: <http://rcp.nshealth.ca>
22. Ontario Ministry of Finance Projections, 2004.
23. Prince Edward Island Reproductive Health Programme. Available from: <http://www.gov.pe.ca/infopei/onelisting.php3?number=20616>
24. The South Vancouver Birth Programme: A new model of maternity care. Collaboration for Maternal and Newborn Health Conference: Maternity Care in the 21st Century. Vancouver; 2005 Feb.
25. Registered Nurses Database (RNDB). Canadian Institute for Health Information.
26. Ontario Midwifery Program, Ministry of Health and Long-Term Care.
27. Vital Statistics (CY 1996 to CY 2001), Registrar General of Ontario; Statistics Canada.
28. OHIP Claims for Medical Services (FY 2001 to FY 2003), Ontario Ministry of Health and Long Term Care.
29. Birth Tables (CY 2002 and CY 2003), Statistics Canada.

30. Claims Database Prototype (FY 1998 to FY 2003), Ontario Ministry of Health and Long Term Care.
31. Daily Census Summary (FY 2003), Financial and Information Management Branch, Ministry of Health and Long-Term Care.
32. Thunder Bay Collaborative Maternity Centre and Chronic Disease Management Centre, Primary Health Care Transition Fund, Health Canada. 2004
33. A report of Manitoba's working group on maternal/newborn services [in press]. 2005 May.
34. Regulated Health Professions Act, 1991, S.O. 1991, c. 18.
35. Independent Health Facilities Act, R.S.O 1990, c. 13.
36. Public Hospitals Act, R.S.O 1990, c. P.40.
37. Alberta Health and Wellness. Integration of midwifery services evaluation project: Final report. Edmonton, Alberta; 2005 Nov 29.
38. Allen DI, Kamradt JM. Relationship of infant mortality to the availability of obstetrical care. *Indiana Journal of Family Practice* 1991;33:609-13.
39. Allen VM, O'Connell CM, Farrell SA, Baskett TF. Economic implications of method of delivery. *Am J Obstet Gynecol* 2005;193:192-7.
40. American College of Nurse-Midwives. The certified nurse-midwife/midwife as first assistant at surgery. 1998 May. Available from: <http://www.midwife.org>
41. Anderson JW, Johnstone BM, Remley DT Breastfeeding and cognitive development: A meta-analysis. *Am J Clin Nutr* 1999;70(4):525-35.
42. Anderson M. Interview report. Discussion paper prepared for the Multidisciplinary Collaborative Primary Maternity Care Project. Ottawa; 2005 Mar.
43. Association of American Medical Colleges. More U.S. medical school seniors choose residencies in competitive and "lifestyle" specialties [press release]. Washington; 2006 Mar 16.

43. Association of Ontario Health Centres. Relative physician liability between provider-based and community-based family health teams [legal opinion]. 2005 Feb 3.
44. Association of Ontario Midwives. Midwifery practice group - hospital integration survey. 2004 May.
45. Atcheson K. Eighth annual report of the obstetrical review committee to the Chief Coroner of the province of Ontario. 2002 May.
46. Baird AG, Jewell D, Walker JJ. Management of labour in an isolated rural maternity hospital. *BMJ* 1996;312:223-6.
47. Benoit C, Carroll D, Kaufert P. Moving in the right direction? Regionalizing maternity care services in British Columbia, Canada. The National Network on Environments and Women's Health. NNEWH Working Paper Series #13 Mar 1, 2001.
48. Biringer A, Carroll J, Van Wagner V, Medves J. Babies can't wait project. Collaborative maternity care scenarios and models. 2005.
49. Biringer A, Tannenbaum D, Caplan J. Provision of maternity care by family medicine graduates of a tertiary care hospital. Hope for the future? Presented at NAPCRG, New Orleans; 2002 Nov 18.
50. Black DP, Fyfe IM. The safety of obstetric services in small communities in northern Ontario. *CMAJ* 1984;130:571-6.
51. Blott M. Medical workforce in obstetrics and gynaecology: "changing times". Chairman's review. Royal College of Obstetricians and Gynaecologists. 2002.
52. Borsellino M. CPSO softens and upgrades stance on home birth. *Medical Post Newsletter* 2001 Mar/Apr.
53. Boswell C, Cannon S. New horizons for collaborative partnerships. *Online J Issues Nurs* 2005;10(1):Available: www.nursingworld.org/ojin/topic26/tpc26_2.htm
54. British Columbia Medical Association. Doctors, province enhance maternity care [press release]. 2004 Oct 15.
55. Burns LR, Connolly T, DeGraaff RA. Impact of physicians' perceptions of malpractice and adaptive changes on intention to cease obstetrical practice. *Journal of Rural Health* 1999;15(2):134-46.

56. Campbell MK, Chance GW, Natale R, Dodman N, Halinda E, Turner L. Is perinatal care in southwestern Ontario regionalized? CMAJ 1991;144(3):305-12.
57. Canadian Federation of Medical Students. Decreased interest in family medicine: Position paper. 2005 Apr 30. Available from: <http://www.cfms.org>
58. Canadian Healthcare Association. 2005 CHA Abridged Guide to Canadian Health Care Facilities on CD. Vol. 13. Ottawa: The Association; 2005.
59. Canadian Healthcare Association. Guide to Canadian Healthcare Facilities, 2001-2002. Vol. 9. Ottawa: The Association; 2001.
60. Canadian Institute for Health Information. Giving birth in Canada: a regional profile. 2004.
61. Canadian Institute for Health Information. Giving birth in Canada: providers of maternity and infant care. 2004.
62. Canadian Institute for Health Information. Hospital Discharge Abstract Database (FY 1996 to FY 2003).
63. Canadian Institute for Health Information. Giving birth in Canada: the costs. 2006.
64. Canadian Medical Association. National physician survey - initial data release background document. 2004 Oct 27.
65. Canadian Medical Protection Association, Canadian Nurses Protective Society. Joint statement on liability protection for nurse practitioners and physicians working in collaborative practice. 2005 Mar.
66. Canadian Medical Protective Association. Fee Schedule for 2006. Available from: <http://www.cmpa-acpm.ca>
67. Canadian Medical Protective Association. Alternative patient compensation models in Canada. Available from: <http://www.cmpa-acpm.ca>
68. Chan BTB. The declining comprehensiveness of primary care. CMAJ 2002;166(4):429-34.

69. Chan BTB, Schultz SE. Supply and utilization of general practitioner and family physician services in Ontario. ICES investigative report. Toronto: Institute for Clinical Evaluative Sciences; 2005.
70. Child Health Network for the Greater Toronto Area. Guidelines for the clinical scope of maternal and newborn services. 2001 Mar.
71. Child Health Network for the Greater Toronto Area. Strengthening the maternal, infant and newborn system by design. Toronto; 2005 Mar.
72. Cohen JR. Patient satisfaction with the prenatal care provider and risk of cesarean delivery. *Am J Obstet Gynecol* 2005;192:2029-34.
73. College of Family Physicians of Canada, Society of Rural Physicians of Canada, Society of Obstetricians and Gynaecologists of Canada. Joint position paper: Training for rural family practitioners in advanced maternity skills and caesarean section. Available from: <http://www.cfpc.ca>
74. College of Midwives of Ontario. Registrants binder. December 2005. Available from: <http://www.cmo.on.ca>
75. College of Midwives of Ontario. When hospital policies differ from College standards. Available from: <http://www.cmo.on.ca>
76. College of Midwives of Ontario. Indications for mandatory discussion, consultation and transfer of care. 2000 Jun. Available from: <http://www.cmo.on.ca>
77. College of Midwives of Ontario. Regulation made under the midwifery act, 1991. Designated drugs. 1994 Jan, Revised 2004 Sep 26. Available from: <http://www.cmo.on.ca>
78. College of Midwives of Ontario. Continuity of care. 1994 Jun. Available from: <http://www.cmo.on.ca>
79. College of Midwives of Ontario. Exemption for Aboriginal midwives. 1994 Jun. Available from: <http://www.cmo.on.ca>
80. Committee on Reproductive Care. Trends in reproductive care: A medical perspective. Ontario Medical Association, 1995.

81. Crutcher RA, Banner SR, Szafran O, Watanabe M. Characteristics of international medical graduates who applied to the CaRMS 2002 match. *CMAJ* 2003;168(9):1119-23.
82. Cyr RM. Myth of the ideal cesarean section rate: commentary and historic perspective. *Am J Obstet Gynecol* 2006;194:932-6.
83. Davies B. The foundation of maternity care: the nurse. *The Future of Maternity Care in Canada*; London, Ontario; 2000 Nov 24-25.
84. de Costa CM, Robson S. Throwing out the baby with the spa water? *MJA* 2004;181(8):438-40.
85. De Vries R. *A pleasing birth: midwives and maternity care in the Netherlands*. Temple University Press; 2005.
86. Demography Division, Statistics Canada. *Population by Local Health Integration Network (CY 1996 to CY 2003)*.
87. Dennis CL. Psychosocial and psychological interventions for prevention of postnatal depression: systematic review. *BMJ* 2005 Jul 2;331:15.
88. Department of Health. *National service framework for children, young people and maternity services. Part III: Maternity services*. United Kingdom; 2004 Oct 4.
89. Dietz WH. Breastfeeding may help prevent childhood obesity. *JAMA* 2001;285(19):2506-7.
90. Downe S, editor. *Normal childbirth: evidence and debate*. Philadelphia: Churchill Livingstone; 2004.
91. Dzakpasu S, Chalmers B for the Maternity Experiences Study Group of the Canadian Perinatal Surveillance System, Health Canada. *Canadian maternity experiences survey pilot study*. *Birth* 2005 Mar;32(1):34-8.
92. Eastern and Southeastern Ontario Regional Perinatal Services Project. *Report*. 2004 Jun 28.
93. Eberts M, Edney R, Kaufman K, Schwartz A. *Task Force on the implementation of midwifery in Ontario*. Ontario Ministry of Health; 1987.

94. Eidson-Ton WS, Nuovo J, Solis B, Ewing K, Diaz H, Smith LH. An enhanced obstetrics track for a family practice residency program: results from the first 6 years. *J Am Board Fam Pract* 2005;18(3):223-8.
95. Enkin M, Keirse MJNC, Neilson J, Crowther C, Duley L, Hodnett E, et al. A guide to effective care in pregnancy and childbirth. Third Ed., New York: Oxford University Press; 2000.
96. Epoo B, Nastapoka U, van Wagner V. Bringing birth back to the community: Midwifery in the Inuit villages of Nunavik. *International Confederation of Midwives*, 2005 Jul.
97. European Institute of Women's Health. Women's health in Europe: facts and figures across the European Union. Dublin, Ireland; 2006.
98. Expert Panel on Health Professional Human Resources. Shaping Ontario's physician workforce. A report to the Ministry of Health and Long-term Care. 2001 Jan.
99. Finnstrom O, Berg G, Norman A, Olausson PO. Size of delivery unit and neonatal outcome in Sweden. A catchment area analysis. *Acta Obstetrica et Gynecologica* 2006;85:63-67.
100. Godwin M, Hodgetts G, Sequin R, MacDonald S. The Ontario Family Medicine Residents Cohort Study: factors affecting residents' decisions to practice obstetrics. *CMAJ* 2002;166(2):179-84.
101. Goertzen J. Maternity care by family physicians: characteristics of successful and sustainable models [letter]. *JOGC* 2005;27(10):933.
102. Goluboff S, Reynolds L, Klein M, Handfield-Jones P. Privileging and consultation in maternity and newborn care. College of Family Physicians of Canada. Available from: www.cfpc.ca
103. Government of British Columbia. Midwives Regulation. Schedule 1 - Drugs and Substances. 1995 Mar, Revised 2005 Jul.
104. Government of Manitoba. Midwifery Regulation, Man. Reg. 68/2000 Schedule B Medications. Regulation made under the Midwifery Act C.C.S.M. c. M125. 1997 Jun 28, Updated 2002 Nov 15.

105. Government of the North West Territories. Midwifery Profession: Prescription and administration of drugs and other substances regulations. R-003-2005. 2005 Jan 29.
106. Grady D. Trying to avoid 2nd cesarean, many find choice isn't theirs. The New York Times. 2004 Nov 29. Available from: <http://www.nytimes.com>
107. Gray R. Labour pains prevent choice of home births. Scotland on Sunday. 2005 Feb 6.
108. Grzybowski SCW, Cadesky AS, Hogg WE. Rural obstetrics: a 5 year prospective study of the outcomes of all pregnancies in a remote northern community. CMAJ 1991 Apr 15;144(8):987-94.
109. Haaf W. Nurse shortage cracking maternity care foundation. The Medical Post 2000 Dec 19;36(42):Available from: www.medicalpost.com
110. Hartmann K, Viswanathan M, Palmieri R, Gartlehner G, Thorp J, Lohr KN,. Outcomes of routine episiotomy: a systematic review. JAMA 2005 May 5;293(17):2141-8.
111. Hawkins M, Knox S. The midwifery option: a Canadian guide to the birth experience. Toronto: Harper Collins; 2003.
112. Health Canada. Family-centred maternity and newborn care: National guidelines. Ottawa: Minister of Public Works and Government Services; 2000.
113. Health Council of Canada. Health care renewal in Canada: Clearing the road to quality. 2006 Feb.
114. Health Council of Canada. Modernizing the management of health human resources in Canada: Identifying areas for accelerated change. Report from a national summit. 2005 Jun 23.
115. Health Council of Canada. Health care renewal in Canada: accelerating change. 2005 Jan.
116. Health Services Restructuring Commission. Proposed inter-professional primary health care costing models. 1999 Nov.
117. Heaphy PE, Bernard SL. Maternal complications of normal deliveries: variation among rural hospitals. Journal of Rural Health 2000 Spring;16(2):139-47.

118. Helewa M. Maternity care: crisis within and without [editorial]. *JOGC* 2005 Sep;27(9):845-6.
119. Heller G, Richardson DK, Schnell R, Misselwitz B, Kunzel W, Schmidt S. Are we regionalized enough? Early-neonatal deaths in low-risk births by the size of delivery units in Hesse, Germany 1990-1999. *International Journal of Epidemiology* 2002;31:1061-68.
120. 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):174-80.
121. Hirst C. Re-birthing: report of the review of maternity services in Queensland. 2005 Mar.
122. Hodnett ED, Downe S, Edwards N, Walsh D. Home-like versus conventional institutional settings for birth. *Birth* 2005 Jun;32(2):151.
123. Hodnett ED, Gates S, Hofmeyr GJ, Sakala C. Continuous support for women during childbirth. *The Cochrane Database of Systematic Reviews*; 2003 Issue 3.
124. Hodnett ED, Lowe NK, Hannah ME, Willan AR, Stevens B, Weston JA et al. Effectiveness of nurses as providers of birth labor support in North American hospitals. *JAMA* 2002;288(11):1373-81.
125. Houd S. The outcome of perinatal care in Inukjuak, Nunavik, Canada 1998-2002. *Birth International* [electronic journal]. Available from: <http://www.acegraphics.com.au/index.html>
126. Hueston WJ. Family physicians' satisfaction with practice. *Archives of Family Medicine* 1998;7(3):242-7.
127. Hundley VA, Milne JM, Glazener CMA, Mollison J. Satisfaction and the three C's: continuity, choice and control. Women's views from a randomized controlled trial of midwife-led care. *Br J of Obs and Gyn* 1997;104:1273-80.
128. Preferences of Canadian physicians for blended payment arrangements: results from the Canadian Medical Associations physician resource questionnaire, 2001-2003. Canadian Association for Health Services and Policy Research Conference. 2004 May 25-28.

129. Hutten-Czapski PA. Decline of obstetrical services in northern Ontario. *Can J Rural Med* 1999;4(2):72-6.
130. Hutten-Czapski PA. Family practice maternity care. *Can Fam Physician* 1998 Apr;44:707-8, 716-8.
131. Iglesias S, Bott N, Ellehoj E, Yee J, Jennissen B, Bunnah T, Schopflocher D. Outcomes of maternity care services in Alberta, 1999 and 2000: a population-based analysis. *JOGC* 2005 Sep;27(9):855-63.
132. Iglesias S, Grzybowski SCW, Klein MC, Gagne GP, Lalonde A. et al. Rural obstetrics: Joint position paper on rural maternity care. *Can J Rural Med* 1998;3(2):75-80.
133. Integration of Midwifery Services Evaluation Project. Final report: key findings and recommendations [excerpt]. November 29, 2004.
134. Jackson DJ, Lang JM, Swartz WH, Ganiats TG, Fullerton J, Ecker J, Nguyen U. Outcomes, safety, and resource utilization in a collaborative care birth center program compared with traditional physician-based perinatal care. *Am J Public Health* 2003 Jun;93(6):999-1006.
135. Johanson R, Newburn M, Macfarlane A. Has the medicalisation of childbirth gone too far? *BMJ* 2002;324:892-95.
136. Johnson KC, Daviss BA. Outcomes of planned homebirths with certified professional midwives: large prospective study in North America. *BMJ* 2005;330:1416.
137. Kaczorowski J, Levitt C. Intrapartum care by general practitioners and family physicians. *Can Fam Physician* 2000;46:587-96.
138. Kasperski JM. Babies can't wait: primary care in obstetrics crisis. A solution focused PHCTF research project. 2004 Dec 9.
139. Klein MC, Johnston S, Christilaw J, Carty E. Mothers, babies and communities: centralizing maternity care exposes them to complications and endangers community sustainability [editorial]. *Can Fam Physician* 2002 Jul;48:1177-9.
140. Klein MC, Kelly A, Spence A, Kaczorowski J, Gryzbowski S. In for the long haul: which family physicians plan to continue delivering babies? *Can Fam Physician* 2002;48:1216-22.

141. Kornelsen J, Grzybowski S. Is local maternity care an optional service in rural communities? *JOGC* 2005;27(4):327-9.
142. Kornelson J, Dahinten S, Carty E. On the road to collaboration: nurses and newly regulated midwives in British Columbia, Canada. *Journal of Midwifery and Women's Health* 2003;48(2):126-32.
143. Kornelson J, Grzybowski S. Safety and community: the maternity care needs of rural parturient women. *JOGC* 2005 Jun:247-54.
144. Kornelson J, Grzybowski S. The costs of separation: The birth experiences of women in isolated and remote communities in British Columbia. *Canadian Women's Studies* ;24(1):75-80.
145. Kornelson J. Solving the maternity care crisis: making way for midwifery's contribution. *British Columbia Centre of Excellence for Women's Health*, 2003 Jun.
146. Lalonde AB. Access to maternity care [editorial]. *JOGC* 2005 May;27(5):445-6.
147. Lane K. Still suffering from the 'silo effect': lingering cultural barriers to collaborative care. *Canadian Journal of Midwifery Research and Practice* 2005 Spring;4(1):8-16.
148. Lankshear S, Rush J. Acute care nursing plan report. A report for the Ministry of Health and Long-Term Care, 2005.
149. Lanz PM, Low LK, Varkey S, Watson RL. Doulas as childbirth paraprofessionals: results from a national survey. *Women's Health Issues* 2005;15:109-16.
150. Laws PJ, Sullivan EA. Australia's mothers and babies 2003. Sydney: AIHW National Perinatal Statistics Unit; 2005 Dec; Perinatal Statistics Series Number 16.
151. Leeman L, Leeman R. Do all hospitals need cesarean delivery capability? an outcomes study of maternity care in a rural hospital without on-site cesarean capability. *Journal of Family Practice* 2002 Feb;51(2):129-34.
152. Birth centres: The Quebec experience. *Collaboration for Maternal and Newborn Health Conference*. Vancouver; 2006 May 5.
153. Levitt C. Training for family practice obstetrics [editorial]. 2002 Jul;48:1175-6.

154. Little M, Shah R, Vermeulen MJ, Gorman A, Dzendoletas D, Ray JG. Adverse perinatal outcomes associated with homelessness and substance use in pregnancy. *CMAJ* 2005 Sept 13;173(6):615-8.
155. Lofsky S. Obstetric human resources in Ontario 1996-97: changing realities, changing resources. *Ontario Medical Review* 1998 Nov;65(10):24-31.
156. Lofsky S, Adamson M. Changing trends in obstetrical physician resources in Ontario 1992-2003. Report to "Babies Can't Wait". 2005 Mar.
157. Low JA. The current crisis in obstetrics. *J Obstet Gynaecol Can* 2005;27(11):1031-7.
158. MacDonald M, Schreiber R, Davis L. Exploring new roles for advanced nursing practice. Prepared for The Canadian Nurses Association, June 2005. 2004 Oct.
159. MacLennan A, Nelson KB, Hankins G, Speer M. Who will deliver our grandchildren? Implications of Cerebral Palsy litigation [commentary]. *JAMA* 2005;294(13):1688-90.
160. Martin B. Nova Scotia Department of Health primary maternity care working group [slide presentation]. 2005 May 5.
161. Maternity Care Enhancement Project. Supporting local collaborative models for sustainable maternity care in British Columbia. Ministry of Health Services: British Columbia; 2004 Dec.
162. McIlwain R, Smith S. Obstetrics in a small isolated community: the cesarean section dilemma. *Can J Rural Med* 2000;5(4):221-3.
163. McKendry R. Physicians for Ontario: too many? too few? for 2000 and beyond. A Report for the Ministry of Health and Long-Term Care. Ontario; 1999 Dec.
164. McNamee M. Are liability issues a barrier to collaborative care? *SOGC News* 2005 Winter:15.
165. McNiven P, Kaufman K, Enkin M. Measuring birth outcomes: validating the perinatal outcome index. *Canadian Journal of Midwifery Research and Practice* 2002 Winter;1(2):9-14.
166. Medves J, Davies B, Heino A. Report of a survey of rural maternity nurses practicing in Ontario [in review].

167. Medves JM, Davies BL. Sustaining rural maternity care--don't forget the RNs. *Canadian Journal of Rural Medicine* 2005;10(1):29-35.
168. Menticoglou SM, Hall PF. The push against vaginal birth. *BJOG* 2002;109:485-91.
169. Milne JK. Patient safety—no excuses. *SOGC Newsletter* 2005 Summer:3.
170. Milne JK. Human resources crisis in obstetrics and gynaecology [editorial]. *SOGC News* 2001 Oct:1.
171. Ministry of Health and Long-Term Care. Report on the integration of primary health care nurse practitioners into the Province of Ontario. Ontario; 2005 Jan.
172. Ministry of Health. Family health teams: guidelines for funding. Available from: <http://www.health.gov.on.ca>
173. Ministry of Health and Long-Term Care. Family health teams: Guide to interdisciplinary team roles and responsibilities. Ontario; 2005 Jul 4. Available from: <http://www.health.gov.on.ca>
174. Ministry of Health and Long-term Care. Family Health Teams [public information]. Available from: <http://www.health.gov.on.ca>
175. Ministry of Health and Long-term Care. McGuinty government launches new health human resources strategy [news release]. 2006 May 3. Available from: <http://www.health.gov.on.ca>
176. Ministry of Health and Long-term Care. Family health team: Guide to interdisciplinary provider compensation. 2006 Feb 28. Available from: <http://www.health.gov.on.ca>
177. Ministry of Training, Colleges and Universities. McGuinty government to open new campus for medical training in Mississauga [release]. 2006 Feb 9.
178. Moon M, Breitkreuz L, Ellis C, Hanson C. Midwifery care: what women want. *Manitoba Action Committee on the Status of Women* 1999 Jun 16.
179. Moster D, Lie RT, Markestad T. Neonatal mortality rates in communities with small maternity units compared with those having larger maternity units. *Br J Obstet Gynaecol* 2001 Sep;108:904-9.

180. Multidisciplinary Collaborative Primary Maternity Care Project. Background research: Final report. 2004 Dec 17.
181. Multidisciplinary Collaborative Primary Maternity Care Project. Health care providers and other stakeholders survey report. 2004 Dec 14.
182. Multidisciplinary Collaborative Primary Maternity Care Project. Guidelines for development of a multidisciplinary collaborative primary maternity care model. Ottawa; 2006 Apr.
183. Multidisciplinary Collaborative Primary Maternity Care Project. Accountability, liability and malpractice. Available from: <http://www.mcp2.ca>
184. Multidisciplinary Collaborative Primary Maternity Care Project. Definition of multidisciplinary collaborative maternity care for MCP². Available from: <http://www.mcp2.ca>
185. Mustard JF, McCain MN, Bertrand J. Changing beliefs to change policy: the early years study. *ISUMA* 2000 Autumn;1(2):76-9.
186. National Aboriginal Health Organization. Midwifery and Aboriginal midwifery in Canada. 2004 May 28.
187. Nesbitt TS. Rural maternity care: new models of access. *Birth* 1996 Sept;23(3):161-5.
188. Nesbitt TS, Connell FA, Hart LG, Rosenblatt RA. Access to obstetric care in rural areas: effects on birth outcomes. *Am J Pub Health* 1990;80(7):814-8.
189. Nesbitt TS, Davidson RC, Paliescheskey MR, Fox-Garcia J, Arevalo JA. Trends in maternity care by graduates and the effect of an intervention. *Fam Med* 1994;26(3):149-53.
190. Nesbitt TS, Larson EH, Rosenblatt RA, Hart LG. Access to maternity care in rural Washington: its effect on neonatal outcomes and resource use. *Am J Public Health* 1997;87(1):85-90.
191. Nolte J, Tremblay M. Enhancing interdisciplinary collaboration in primary health care in Canada. 2005 Apr.

192. Nova Scotia Department of Health. Report of the Primary Maternity Care Working Group. Halifax; 2005 Jun.
193. Oandasan I, D'Amour D, Zwarenstein M, Barker K, Purden M. et al. Interdisciplinary education for collaborative, patient-centred practice: research and findings report. Ottawa: Health Canada; 2004.
194. O'Connor N. South Van birth support group looking for more new moms. The Vancouver Courier. 2004 Aug 5.
195. Office of the Auditor General of Ontario. Special report: Accountability and value for money, 2000. Available at: <http://www.auditor.on.ca>
196. Olsen O, Jewel MD. Home versus hospital birth [Cochrane review]. The Cochrane Library, Issue 1 2006.
197. Ontario College of Family Physicians. Babies Can't Wait. Proposal to the Primary Health Care Transition Fund, Health Canada. 2005.
198. Ontario Hospital Association. The intergration of midwifery services into hospitals. 1994. Available from: <http://www.oha.com>
199. Ontario Medical Association Human Resources Committee. Position paper on physician workforce planning. 2002 Apr 4.
200. Ontario Medical Association, Association of Ontario Midwives. A joint statement of professional relations between obstetricians and registered midwives in Ontario. 2005 Feb.
201. Ontario Medical Association, Association of Ontario Midwives. Guidelines for maternal/neonate transfer from home to hospital. 2005 Feb.
202. Ontario Medical Association, Committee on Reproductive Care. Trends in reproductive care: A medical perspective. 1995.
203. Ontario Medical Association, Subcommittee on Hospital Privileges. Section on general and family practice: Future patterns of obstetrics in Ontario [internal document], 1985.
204. Ontario Ministry of Health. Ontario women get greater choice in childbirth [news release]. 1994 Mar 4.

205. Ontario Ministry of Health and Long Term Care. Local health integration networks (LHINs): complete findings from the LHIN community workshops. 2005 Jan 11.
206. Ontario Physician Human Resources Data Centre. Physicians in Ontario 2002: reports from the active physician registry. 2003.
207. O'Reilly M. Medical recruitment in rural Canada: Marathon breaks the cycle. *CMAJ* 1997 Jun;156:1593.
208. Orrantia E, Poole H, Strike J, Zelek B. Evaluation of a novel rural obstetrical care model. Presentation to Canadian College of Family Physicians, Family Medicine Forum, 2004 Nov.
209. Peddle LJ, Brown J, Buckley J, Dixon W, Kaye J, Muise M et al. Voluntary regionalization and associated trends in perinatal care: the Nova Scotia reproductive care program. *Am J Obstet Gynecol* 1983;145(20):170-6.
210. Pellizzari R, Medves J. Ontario's maternity crisis: a time for action. Ontario Women's Health Council, 2002 Nov.
211. Perinatal Partnership Program of Eastern and Southeastern Ontario. Perinatal services in Ontario: how are we doing? 2005 Mar.
212. Perry TR. The certified registered nurse anesthetist: occupational responsibilities, perceived stressors, coping strategies, and work relationships. *AANA Journal* 2005 Oct;73(5):351-6.
213. Peterson TC, Reiss PJ, Wadland WC. Restructuring a family practice obstetrics curriculum. *J Fam Pract* 1990;22:219-25.
214. Picard A. Study confirms home-birth safety, researchers say. *The Globe and Mail*, online edition. 2006 Apr 4. Available from: <http://www.theglobeandmail.com>
215. Polaschek NR. Cultural safety: a new concept in nursing people of different ethnicities. *Journal of Advanced Nursing* 1998;27:452-7.
216. Pope R, Graham L, Patel S. Woman-centred care. *International Journal of Nursing Studies* 2001 Apr;38(2):227-38.

217. Price D, Howard M, Shaw E, Zazulak J, Waters H, Chan D. Family medicine obstetrics: collaborative interdisciplinary program for a declining resource. *Can Fam Physician* 2005 Jan;51:68-74.
218. Price DJ, Lane C, Klein MC. Maternity care by family physicians: characteristics of successful and sustainable models. *JOGC* 2005 May;27(5):460-66.
219. Professional Association of Interns and Residents of Ontario. Primary importance: new physicians and the future of family medicine. Position paper on the sustainability of family medicine. 2004 Jun.
220. Public Health Agency of Canada. Make every mother and child count: report on maternal and child health in Canada. 2005 Apr 7.
221. Public Health Agency of Canada. Canadian Perinatal Surveillance System. Available at: <http://www.phac-aspc.gc.ca/rhs-ssg/index.html>
222. Rachlis V. "Inside out": letter from the president of the Ontario College of Family Physicians. 2005 Jul 18;#17.
223. Ratcliffe SD, Newman SR, Stone MB, Sakornbut E, Wolkomir M, Thiese SM. Obstetric care in family practice residencies: a 5-year follow-up survey. *JABFP* 2002 Jan/Feb;15(1):20-4.
224. Regional Perinatal Services Project Coordinating Committee. At risk: perinatal services in southwestern Ontario. Issue summary and recommendations for action.
225. Registered Nurses Association of Ontario. Seventy percent (70%) full time RN employment. Available from: <http://www.rnao.org>
226. Reid AJ, Grava-Gubins I, Carroll JC. Family physicians in maternity care. Still in the game? Report from the CFPC's Janus project. *Can Fam Physician* 2000;46:601-11.
227. Reid T, Grava-Gubins I, Carroll JC. Maternity care report: family physicians meeting the needs of tomorrow's society. *Can Fam Physician* 2002;48:1225-6.
228. Resnik R. Can a 29% cesarean delivery rate possibly be justified? [editorial]. *Obstet Gynecol* 2006 Apr;107(4):752-4.
229. Reynolds L. What do we need in order to rebuild Canadian maternity care. *The Accoucher* 2000 Sep;7(3):1-2.

230. Reynolds L, Klein MC, editors. Recommendations for a sustainable model of maternity and newborn care in Canada. Proceedings of the Future of Maternity Care in Canada: Crisis and Opportunity; 2000 November; London, Ontario, 2001.
231. Rising SS. Centering pregnancy: an interdisciplinary model of empowerment. *Journal of Nurse-Midwifery* 1998 Jan/Feb;43(1):46-54.
232. Roberts RG, Bobula JA, Wolkomir MS. Why family physicians deliver babies. *J Fam Pract* 1998 Jan;46(1):31-3.
233. Rogers J. Sustainability and collaboration in maternity care in Canada: dreams and obstacles. *Can J Rural Med* 2003;8(3):193-8.
234. Rogers J. Integrated maternity care for rural and remote communities. A proposal to the Primary Health Care Transition Fund, Health Canada. 2004
235. Rogers J. Midwife projections. *Midwifery Education Program*; 2005 Oct.
236. Rogers J. Integrated models in maternity care: A potential solution of Canada's rural and remote communities. Paper presented at 3rd National Conference of Canadian Rural Health Research Society. Halifax, Nova Scotia; 2002 Oct 24-26.
237. Rooks JP, Weatherby NL, Ernst EKM, Stapleton S, Rosen D, Rosenfield A. Outcomes of care in birth centers. The National Birth Center Study. *New Engl J Med* 1989;321:1804-11.
238. Rosenblatt RA, Reinken, J, Shoemack P. Is obstetrics safe in small hospitals? Evidence for New Zealand's regionalised perinatal system. *Lancet* 1985;2:429-32.
239. Rourke J. Trends in small hospital obstetric services in Ontario. *Can Fam Physician* 1998;44:2117-24.
240. Royal College of Midwives. Homebirth handbook volume 1: promoting homebirth. RCM Trust, 2002.
241. Shah CP, Moloughney BW. A strategic review of the Community Health Centre Program. Ministry of Health and Long-Term Care; 2001 May.
242. Smith LFP, Reynolds JL. Factors associated with the decision of family physicians to provide intrapartum care. *CMAJ* 1995;152(11):1789-97.

243. Snelling S, Ehrlich A, Grafton D, Michel I, MacLean L, McFarland V. Evaluation of the prenatal and postnatal nurse practitioner services initiative: interim report. 2005 Mar.
244. Society of Obstetricians and Gynaecologists. Impact of inadequate prenatal care on neonatal mortality will rise in Canada [media advisory]. Quebec; 2005 Jun 20. Available from: <http://www.sogc.org>
245. Society of Obstetricians and Gynaecologists of Canada. Midwifery. SOGC Policy Statement No. 126, 2003 Mar.
246. Society of Obstetricians and Gynaecologists of Canada. A guide for health professionals working with Aboriginal peoples. SOGC Policy Statement No. 100; 2000 Dec.
247. Society of Obstetricians and Gynaecologists of Canada. Caesarian section on demand - SOGC's position [media advisory]. 2004. Available from: <http://www.sogc.org>
248. Society of Obstetricians and Gynaecologists. The prevention of early-onset neonatal group B streptococcal disease. Clinical Practice Guideline No. 149, 2004 Sep.
249. Society of Obstetricians and Gynaecologists of Canada. Multidisciplinary collaborative primary maternity care. A proposal to the Primary Health Care Transition Fund, 2004 Feb.
250. Society of Obstetricians and Gynaecologists of Canada, The College of Family Physicians of Canada, The Society of Rural Physicians of Canada. Number of births to maintain competence. 2002 Apr;113.
251. Stanimir G. Shared obstetrical care: A case study. Presented at the Ontario Hospital Association Interdisciplinary Care Conference; 2004 Dec.
252. Starfield B. Primary care visits and health policy. CMAJ 1998;159:795-6.
253. Statistics Canada. Births, 2003. The Daily; 2005 Jul 12. Available from: <http://www.statcan.ca>
254. Statistics Canada. Study: disparities in birth outcomes by neighbourhood income in British Columbia: 1985-2000. The Daily; 2004 Nov 16.
255. Stewart M, McCandlish R, Henderson J, Brocklehurst P. Review of evidence about clinical, psychosocial and economic outcomes for women with straightforward

pregnancies who plan to give birth in a midwife-led birth centre, and outcomes for their babies. 2004 Dec.

256. Northern Ontario school of medicine: education for interdisciplinary care [slide presentation]. Presented at the Ontario Hospital Association Interdisciplinary Care Conference; 2004 Dec.

257. Sutherns R. Adding women's voices to the call for sustainable rural maternity care. *Can J of Rural Med* 2004;9(4):239-44.

258. Sutherns R. Women's experiences of maternity care in rural Ontario: do doctors matter? [Executive summary]. Feb 2002.

259. Taylor HA, Hansen GH. Perceived characteristics of successful family practice residency maternity care training programs. *Fam Med* 1997;29(10):7098-7114.

260. Thacker SB, Stroup D, Chang M. Continuous electronic heart monitoring for fetal assessment during labour [review]. *The Cochrane Database of Systematic Reviews* 2001, Issue 2.

261. The Canadian Medical Association and The Canadian Medical Protection Association. Tort Reform 2000: structures and subrogation. Available from: <http://www.cmpa-acpm.ca>

262. The Canadian Medical Protective Association. Medical liability practices in Canada: towards the right balance. August 2005. Available from: <http://www.cmpa-acpm.ca>

263. The Maternity Centre of Hamilton. Annual Report: December 2001 - December 2002.

264. The Maternity Centre of Hamilton. Collaborative model of family physician maternity care [slide presentation].

265. The national student and faculty survey of Canadian schools of nursing 2003-2004. Report 3: Diploma and degree programs reported: admissions, enrolment and graduates by type of nursing program, 1999 to 2003.

266. The Royal Australian and New Zealand College of Obstetricians and Gynaecologists. GP obstetrics: is it an endangered profession? *O&G* 2004 Mar;6(1).

267. The Scottish Executive. A framework for maternity care services in Scotland. 2001 Feb. Available from: <http://www.scotland.gov.uk/library3/health/ffms-00.asp>
268. Torr E, editor, for the British Columbia Reproductive Care Program. Report on the findings of the Consensus Conference on Obstetrical Services in Rural or Remote Communities, Vancouver, BC, 2000 Feb. 24-26. *Can J Rural Med* 2000;5(4):211-17.
269. Tracy SK, Sullivan E, Dahlen H, Black D, Wang YA, Tracy MB. Does size matter? a population-based study of birth in lower volume maternity hospitals for low risk women. *BJOG* 2006 Jan;113(1):86-96.
270. Tucker JS, Hall MH, Howie PW, Reid ME, Barbour RS, Florey CduV, McIlwaine GM. Should obstetricians see women with normal pregnancies? A multicentre randomised controlled trial of routine antenatal care by general practitioners and midwives compared with shared care led by obstetricians. *BMJ* 1996 Mar 2;312:554-9.
271. Van Wagner V. Expanded roles/scope of practice (class) for midwives: A proposed framework for considering the role of midwives in supporting local maternity care. Submission to Ontario Maternity Care Expert Panel; 2005 Jun.
272. Walsh D, Downe S. Outcomes of free-standing, midwife-led birth centres: a structured review. *Birth* 2004 Sept.;31(3):222-9.
273. Wang EEL. Breastfeeding. Canadian guide to clinical preventive health Care. Ottawa; Health Canada, 1994; 84-98.
274. Wen SW, Liu S, Marcoux S, Fowler D. Trends and variations in length of hospital stay for childbirth in Canada. *CMAJ* 1998;158(7):875-80.
275. Westview Community Health Centre. Shared care maternity program description. Edmonton, Alberta.
276. Wieggers TA. General practitioners and their role in maternity care. *Health Policy* 2003;66(1):51-9.
277. FHNs, FHGs and FHTs [slide presentation]. Presented at the Ontario Hospital Association Interdisciplinary Care Conference; 2004 Dec.
278. Woodward C A, Rosser W. Effect of medicolegal liability on patterns of general and family practice in Canada. *CMAJ* 1989;141:291-9.

279. Woolard LA, Hays RB. Rural obstetrics in New South Wales. *Aust NZ J Obstet Gynaecol* 1993;33(3):240-2.
280. World Health Organization. Appropriate technology for birth. *Lancet* 1985 Aug 24;2(8452):436-7.
281. World Health Organization. Safe motherhood: care in normal labour: a practical guide. Geneva: WHO Division of Reproductive Health, 1997.
282. World Health Organization (2000). Munich declaration: nurses and midwives: a force for health, 2000.
283. Wright B, Scott I, Woloschuk W, Brenneis F. Career choice of new medical students at three Canadian universities: family medicine versus specialty medicine. *CMAJ* 2004;170:1920-24.
284. Yang H, Byrick R, Donen N. Analysis of anaesthesia physician resources: projected Ontario deficit in 2005. *Canadian Journal of Anaesthesia* 2000;47:179-84.
285. Young D. The push against vaginal birth. *Birth* 2003;30(3):149-52.
286. Yu VHU, Dunn PM. Development of regionalized perinatal care. *Seminars in Neonatology* 2004 Apr;9(2):89-97.
287. Legal issues in interdisciplinary care [slide presentation]. Presented at the Ontario Hospital Association Interdisciplinary Care Conference; 2004 Dec.

Established Maternity Care Models –

Legend: Acute Care Nurse Practitioners (ACNP), FPs (FP), RMs (RM), Nurses (RN), Primary Health Care Nurse Practitioners [RN(EC)], OBs (OB), Paeds (Paeds)

Model Name/ Intrapartum Care Provider	Model Description	Clinical Care	Providers in Model	Opportunities for Sharing call or collaboration	Community, Population and Institutional Issues
FP Group or Solo Practice	<p>FPs work as part of a group practice or as solo practitioner</p> <p>Provide services across the continuum of maternity care and 24/7 coverage.</p> <p>Intrapartum care in hospital (Level I, II or III)</p> <p>FP scope low-risk may include induction, augmentation, vacuum. Includes care for newborn. Consultation or transfer of care to specialist if needed</p> <p>Volume of practice varies widely from < 10 births per year to >100¹ average is 16-22 births per year¹per FP</p>	<p>Prenatal care by FP either by primary provider or shared with a group of FPs.- in some models RNs may also be part of prenatal care provision</p> <p>Prenatal education may be offered by hospital or public health.</p> <p>Primary intrapartum care provider: FP or another team member on-call. In some groups one or more FPs specialize in intrapartum care most of the call for the group –variations on a “labourist” model.¹ Nursing care by staff RNs during intrapartum</p> <p>Postnatal and newborn care by FP or group with nursing care during postpartum stay</p>	<p>FPs</p> <p>Nurses . (RN)</p> <p>OBs and other consultants if referral needed</p>	<p>Variety of systems of call –soft or hard call¹</p> <p>Amount of on-call depends on size of group and call system</p> <p>Variable levels of collaboration within group. May or may not share philosophy of care policy and protocols or share team meetings</p> <p>Other services arranged by referral to other providers. Woman may have to visit multiple providers at multiple sites.</p> <p><i>Could be adapted to a multi or inter-professional model</i></p>	<p>Team FP most common model. Can be used in any community large enough to sustain group practice of FPs. All births occur in hospital.</p> <p>Solo FP can work within any community setting. High-risk of provider burn-out, particularly with no shared on-call. Problems with long-term sustainability.</p> <p>Scaleable – high or low volume/urban or rural but community must be able to support team</p> <p>Fills a need for maternity services close to home for small communities.</p> <p>Supports model of birth as a normal physiological process when FPs provide care for uncomplicated pregnancies. Continuity of care within the team/group practice. Variable continuity of carer.</p> <p>Fee for service remuneration norm with some Alternate Payment Plans and salary systems for MDs. Salary for RNs.</p>

ⁱ “Soft” and “hard” call systems are described in the Models Chapter of the Ontario Maternity Care Expert Panel Report

Established Maternity Care Models

Model Name/ Primary Intrapartum Care Provider	Model Description	Clinical Care	Providers in Model	Opportunities for Sharing call or collaboration	Community, Population and Institutional Issues
<p>Obstetrician Group or Solo Practice</p>	<p>OBs work solo or are part of a group practice</p> <p>Provide services across the continuum of maternity care and 24/7 coverage.</p> <p>Intrapartum in hospital (Level I, II or III)</p> <p>OB scope includes high-risk intrapartum care based on level of hospital</p> <p>Newborn care not part of scope</p> <p>Volume of practice average 220¹ per year – range is from <10 to >500 births per year per OB</p> <p>Currently > 60% of births in the province cared for within this model</p>	<p>Prenatal care by OB either by primary provider or shared with a group. In some models RNs may also be part of prenatal care provision</p> <p>Prenatal education may be offered by hospital or public health.</p> <p>Primary intrapartum care provider: OB or another team member on-call. RNs provide care during intrapartum</p> <p>Postpartum maternal care by OB or group and nursing care during postpartum maternal-newborn hospital stay</p> <p>Primary newborn care by Paeds and/or FP, and nursing staff</p> <p>OBs provide consultation for FPs and RMs providing primary maternity care</p> <p>Transfer to tertiary care or sub-specialist may be required</p>	<p>OBs</p> <p>RNs</p> <p>Paeds or FP</p> <p>Other consultants if referral needed</p>	<p>Variety of systems of call –soft or hard call</p> <p>Amount of on-call depending on size of group and call system.</p> <p>Variable levels of collaboration within group and with other providers May or may not share philosophy of care policy and protocols</p> <p>Other services arranged by referral to other providers.- Woman may have to visit multiple providers at multiple sites.</p> <p><i>Could be adapted to a multi or inter-professional model</i></p>	<p>Group OB is current model in urban centres – more challenging in smaller centres since minimum number of births are required to sustain call-group. Risk of provider burn-out and problems with long-term sustainability in small groups.</p> <p>Teams work in medium and large communities, medium and high volume settings, any community that can attract enough OBs for a group practice.</p> <p>Supports OMCEP principles re access to care for those women who require specialist care; provides consultation to other care providers – ideally accessible through regional referral network</p> <p>Usually continuity of care for prenatal but not intrapartum.</p> <p>Fee for service remuneration norm with some Alternate Payment Plans and salary systemsfor MDs. Salary for RNs</p>

Ontario Maternity Care Expert Panel
Appendix C– Models of Maternity Care
Established Maternity Care Models

Model Name/ Primary Intrapartum Care Provider	Model Description	Clinical Care	Providers in Model	Opportunities for Sharing Call or collaboration	Community, Population and Institutional Issues
Midwives (RM) Group Practice	<p>One RM as care coordinator. Small team of RMs (2-4) share care for each woman within practice groups, which range from 2-12 RMs.</p> <p>Provide services across the continuum of maternity care and 24/7 coverage.</p> <p>Intrapartum care in hospital (Level I, II or III) at home births or in birth centre</p> <p>RM scope low-risk. Can provide primary care after consultation for induction, augmentation.</p> <p>Newborn care in scope</p> <p>Care transferred to specialist if needed. Supportive care and care within scope after transfer</p> <p>Volume of practice for a full time RM is 40 courses of care as first RM and 40 as second RM at birth (60-80 births per year)³</p>	<p>Prenatal care by one or two RMs who plan to attend birth –some practices may share care with small team</p> <p>Prenatal education and health promotion an integral part of model of care</p> <p>Primary intrapartum care provider: RM or another team member on-call. -births normally attended by two RMs -intrapartum care in hospital, home or birth centre</p> <p>Postnatal and newborn care by RM or group. Early discharge from hospital with postpartum care by RMs is common. -in hospital postpartum nursing care for mothers and babies by staff RNs with visits by RM.</p> <p>Postpartum home visits and breastfeeding support an integral part of care</p>	<p>RMs</p> <p>RNs (if postpartum stay or as second attendant at birth)</p> <p>RMs in Ontario include registered midwives, RMs, and aboriginal midwives⁴</p> <p>OBs and other consultants if referral needed</p>	<p>Variety of systems of sharing care and call - model based on “knowing your midwife”/maximizing continuity of care –size of call group limited by CMO⁵ Group practices provide support and on-call coverage. Group practices range in size from 2-12.</p> <p>Collaboration within group of RMs: required to share philosophy of care, policies and protocols.</p> <p>Amount of off-call depending on size of group and call system.</p> <p>Other services arranged by referral to other providers -woman may have to visit multiple providers at multiple sites.</p> <p><i>Could be adapted to a multi or inter-professional model</i></p>	<p>Urban and rural hospital, home births High or low volume settings</p> <p>May rarely be single RM in small community with RNs as second attendants, family doctors or OBs providing coverage during time off. The CMO Model of Care standard and the MOHLTC (funder) requires RMs to work in groups whenever possible.</p> <p>Low-risk care. Provides continuity of carer and care. Supports the OMCEP principles for birth close to home, as a normal physiological process</p> <p>Suitable for all women but responsive to disadvantaged/marginalized women who benefit from personalized care</p> <p>Remuneration through a course of care payment system through Community Health Branch of MOHLTC</p>

Model Name/ Primary Intrapartum Care Providers	Model Description	Clinical Care	Providers in Model	Opportunities for Shared Call or Collaboration	Community, Population and Institutional Issues
<p>FPs (FP) Rural/Remote model with anaesthesia and surgical capacity</p>	<p>Care model for small community involving shared care between a group of FPs in a Level 1 hospital – linked with FPs and RNs in more remote communities</p> <p>Provide services across the continuum of maternity care and 24/7 coverage.</p> <p>Intrapartum care in Level I hospital</p> <p>Low and medium risk – FPs team includes those with skills to perform c-section; or provide anaesthesia. If necessary transfer in labour to OB at a Level II or III hospital</p> <p>Communities served may be spread out and road access limited – transfer may be by air.</p> <p>Volume of practice can range from 20 -200 + births per year</p>	<p>Prenatal care by FP- if FP does not do intrapartum care, woman transferred to one who does at 28-32 weeks.</p> <p>In remote areas most prenatal by RNs and/or nurse practitioners (RN(EC)) in nursing stations with FP or OB consultation, as required. At 34 weeks, decision made whether woman can give birth in community or if high-risk transfer to Level II or III hospital</p> <p>Women have variable access to prenatal health education and promotion through community and public health programs.</p> <p>Primary intrapartum care provider: FP or another team member on-call. RNs provide care during intrapartum</p> <p>Postpartum and newborn care in hospital by attending MD and nursing staff for women from town or remote location</p> <p>Postpartum and newborn care for women near town within a week by attending MD or their FP. For women returning to outlying communities, limited postpartum care by RN or NP in community.</p>	<p>FPs</p> <p>FPs with advanced skills in pain management and complicated L+D help maintain childbirth in the community</p> <p>RNs</p> <p>OBs And other consultants on site clinic q 2-6m and distance consult/transfer if referral needed</p>	<p>Shared care (may be sequential) and shared-on-call</p> <p>Providers work to the fullest extent of their scope of practice.</p> <p>This model is innovative in having alternate practitioners doing epidurals, anaesthesia and some operative intrapartum procedures. Depends on highly skilled RNs as part of intrapartum team</p> <p><i>Could be adapted to multi or inter-professional model. Future ideas for the team include: potential to include RMs and or aboriginal RMs; enhanced prenatal education clinic for all women at the hospital, a lactation consultant for prenatal and postpartum, in hospital and by telecare. Doula program, especially with First Nations' members</i></p>	<p>Model designed to retain maternity care providers in rural settings and improve quality of life in community with at least 6-8 maternity care providers.</p> <p>Innovative model and staffing to keep as many births in the community as possible, retain the skills of those who only want to do pre or postpartum care and protects the time of those who do intrapartum care. Deals with shortage of anaesthesiologists by having other trained providers, preventing transfers outside community for pain management alone.</p> <p>Requires protocols for assessing risk at the prenatal stage so transfer is limited during intrapartum care. Strong consulting between hospital staff and OB at Level II or III hospital needed. Protects care for rural communities and allows women to give birth close to home.</p> <p>Continuity of care and often continuity of carer.</p> <p>Fee for service remuneration norm with some APPs and salary systems for MDs. Salary for RNs</p>

Model Name/ Primary Intrapartum Care Provider	Model Description	Clinical Care	Providers in Model	Opportunities for Shared Call or Collaboration	Community, Population and Institutional Issues
<p>Family Physicians (FP) Rural/Remote model without anaesthesia and surgical capacity</p>	<p>Care model for small community involving shared care between a group of FPs in a Level I hospital – linked with FPs and RNs in more remote locations No c-section or anaesthesia capacity</p> <p>Provide services across the continuum of maternity care and 24/7 coverage.</p> <p>Intrapartum care in Level I hospital</p> <p>Scope: low-risk if necessary transfer in labour to OB at a Level II or III hospital</p> <p>Communities served may be spread out and road access limited – transfer may be by air.</p> <p>Volume of practice can range from 20 -200 + births per year</p>	<p>Similar to above model but limited pain management and surgical options. If desire pain management in advance, birth takes place outside of community when possible. If known surgical procedure needed, birth to leave community. At 34 weeks, decision made whether woman can give birth in community or if high-risk transfer to Level II or III hospital</p> <p>Requires protocols for assessing risk at the prenatal stage so transfer is limited during intrapartum care. Strong consulting between hospital staff and OB at Level II or III hospital needed. Protects care for rural communities and allows women to give birth close to home.</p> <p>Maternity care is retained in community but more women need to transfer than in FPmodel with anaesthesia and surgery</p>	<p>FP RN RN(EC)s</p> <p>OBs and other consultants On site clinic q 2-6m and distance consult/transfer if referral needed</p>	<p>Shared care (may be sequential) and shared-on-call</p> <p>In Marathon in northern Ontario a similar model has a very creative approach to on-call systems: FPs take responsibility for an entire month of due dates and see same women for prenatal, intrapartum and postpartum care, while only taking call for two months per year</p> <p><i>Variations: In a small community with low volume of births and 1)a decreasing number of FPs who wish to provide maternity care- a RM could join the team 2) no FPs who want to provide intrapartum care -a team of RMs could maintain births in the community</i></p> <p><i>Innovations in telehealth are important supports for this model to support access and keeping care as close to home as possible</i></p>	<p>A model designed to retain maternity care providers in rural settings and improve their quality of life in community with at least 6-8 maternity care providers.</p> <p>Appropriate for rural and remote areas</p> <p>Suitable for low-risk women only</p> <p>Protects care for rural communities and allows women to give birth close to home. Women in remote communities must transfer to give birth in hospital, but if low-risk, do not need to travel further.</p> <p>Continuity of care and often continuity of carer</p> <p>Inability to deal with pain management issues or surgical procedures means that some women have to leave community for birth. Have to accept risk-threshold inherent in this model.</p> <p>Fee for service remuneration norm with some APPs and salary systems for MDs Salary for RNs</p>

Ontario Maternity Care Expert Panel
Appendix C– Models of Maternity Care
Established Models of Maternity Care:
Multi-professional

Model Name/ Primary Intrapartum Care Provider	Model Description	Clinical Care	Providers in Model	Opportunities for Shared Call or Collaboration	Community, Population and Institutional Issues
Multi-professional High-risk Care Maternal-Fetal Medicine (MFM) Team	<p>Hospital and home care of women with maternal fetal risk factors requiring closer surveillance</p> <p>Majority of care in a Level III facility If hospitalization is sudden and unexpected, woman transferred to a Level II or III facility closest to home using the Critical transfer process. Land &/or air transport may be involved.</p> <p>Newborn care in hospital by paediatric staff</p> <p>Volumes vary with size of centre – many women seen episodically for consultation with some seen for ongoing care. Mount Sinai the largest centre does >12000 visits /year</p>	<p>With known risk factors, preconception consultation with MFM specialist. referral from any primary provider in the community, at any stage of a woman’s pregnancy.</p> <p>Prenatal referral from regular care provider to MFM team, including high-risk OBs, ACNPs specializing in perinatal care and/or consultation with NICU team (Neonatologist and ACNP). Visits may be exclusively in the Level III center or shared with community provider.</p> <p>Primary intrapartum care provider: MFM OB on-call. If complication leading to transfer has resolved (eg. the woman is now at term, she may be transferred back to her local OB, FP or RM for birth.</p> <p>Following delivery, the woman recovers in the L+D or cardiac/ ICU unit, as appropriate The newborn is monitored accordingly (i.e. NICU, Paed, FP, RM). Ideally the newborn is kept with mother but may require transfer to an NICU, SCN. Woman transferred to a post partum unit or to care in a unit without newborns if her baby is not with her (e.g. in NICU, stillborn). Postpartum care at MFM clinic or may return to FP or to local OB for care based on plan of care & level of risk. Newborn followed in an NICU or SCU or mother/baby unit located in the same facility as the mother. Goal is discharge to mom or transfer to a unit closer to the woman’s home ASAP.</p>	<p>MFM team</p> <p>MFM OBs</p> <p>ACNPs in perinatal care.</p> <p>OBs: on-call within the Level III center may provide emergency care &/or backup to MFM team.</p> <p>Community caregivers: OBs, FP, RM, RN(EC), in home community who provide a supportive and or shared care role prenatally and intrapartum. May provide post partum care</p>	<p>The MFM team coordinates the care and works collaboratively with other sub-specialty</p> <p>Several key roles for RNs, including ACNP in perinatal care, nursing staff during intrapartum care, APN and nursing role in ICU or CCU, or</p> <p>Highly multi-professional model with a great deal of collaboration. MFM specialist/primary OB the person most responsible for care plans and outcomes.</p> <p>Strong links with community care providers allow early identification of risk And allow continuity of care with an MFM team on whom the woman can depend.</p> <p><i>Variations include outreach clinics by MFM OBs to Level II centres – supporting care close to home and local competencies</i></p>	<p>High-risk care requires a Level III facility until women and their babies can be transferred back to the community. Safest model of care for women with risk factors.</p> <p>Consistent with OMCEP principle of access to high-risk care</p> <p>May mean periods of time away from one’s home or community - local beds are limited and women may have to transfer very long distances. Goal to support as much care as close to home as possible. Team designed to promote continuity of care but multiple providers may make this challenging</p> <p>Remuneration mix of fee for service, APPs and salary systems for MDs. Salary for RNs Fee for service, hospital budgets, APPs</p>

**Established Models of Maternity Care:
Multi-professional**

Model Name/ Primary Intrapartum Care Provider	Model Description	Clinical Care	Providers in Model	Opportunities for Shared Call or Collaboration	Community, Population and Institutional Issues
<p>Sequential Multi-professional Care Model</p>	<p>Care by one provider until 32 weeks gestation, then transfer to another provider for 3rd trimester and intrapartum care</p> <p>Low-risk care to FPs and RMs; high-risk to OBs, consultation as needed</p> <p>Hospital or out of hospital settings</p> <p>This model can work for low-risk or high-risk care of mother and newborn in low or high volume settings</p>	<p>Prenatal care by FP,RN(EC) or RM in woman’s community.</p> <p>Primary intrapartum care provider: Transfer of all women at 32 weeks to intrapartum care provider: FP, RM, or OB. RNs provide intra and/or postpartum care in hospital</p> <p>Postpartum care of woman and newborn returns to the original primary provider, in the original setting.</p>	<p>FPs, RMs RN(EC)s RNs</p> <p>OBs and other consultants if referral needed</p>	<p>Sequential care.</p> <p>Variety of systems of call</p> <p>Shared multi-professional care but not to degree of inter-professional collaboration.</p> <p>Community Linkages. Potential for RN(EC) and PHN to have extensive role in early prenatal period.</p> <p>Allows each provider to contribute within their scope of practice</p> <p><i>Variations could include opportunities to meet intrapartum providers early in care to improve continuity</i></p>	<p>Can be used in most any setting, including small communities, rural and remote areas. For remote areas, care may not switch at 32 weeks but just prior to point of intrapartum care, requiring planned transfer to a hospital, by road or air.</p> <p>Applicable to urban and rural settings</p> <p>Using other community providers for pre and postnatal care frees intrapartum care providers and allows for basic prenatal and postpartum care in one’s own community, with a familiar primary care provider. Transfer occurs only for intrapartum care.</p> <p>No guaranteed continuity of care and definitely no continuity of carer.</p> <p>Remuneration may be through CHC, FHN or FHT or hospital funding as well as fee for service for MDs and course of care fees for RMs May be best supported by harmonized payment model for multi and inter-professional practice.</p>

**Established Models of Maternity Care:
Multi-professional**

Model Name/ Primary Intrapartum Care Provider	Model Description	Clinical Care	Providers in Model	Opportunities for Shared Call or Collaboration	Community, Population and Institutional Issues
<p>Aboriginal Health Access Centres</p>	<p>Based on examples at Six Nations and in Thunder Bay Services appropriate to local community, with an emphasis on primary health care, particularly for those without a personal FP.</p> <p>Aboriginal Health Access Centres (AHACs) are located in urban areas and on reserves.</p> <p>Primarily for low-risk prenatal and postpartum of mother and newborn in familiar and accessible setting.</p> <p>10 AHACs around province</p>	<p>In urban centres, prenatal care provided by RNs or RN(EC)s working in clinic or as a Health Outreach Worker. Worker facilitates link to primary maternity providers in the area.</p> <p>Centres also have an Aboriginal Healthy Babies/Healthy Children Consultant.</p> <p>Primary intrapartum care provider: FP and/or RM may be available at some Centres. Most centres coordinate care for women with intrapartum providers in community: FPs, OBs, RMs and Aboriginal RMs</p> <p>Traditional birth centre may be part of AHAC</p>	<p>RNs</p> <p>RN(EC)s,</p> <p>FPs</p> <p>RMs.</p> <p>OBs and other consultants</p> <p>On site clinic q 2-6m and distance consult/transfer if referral</p>	<p>Sequential care from the AHAC to an area hospital and then back again.</p> <p>Urban, rural and remote birth centres can be part of centre or linked to it -care by Aboriginal RMs and/or other traditional healers possible.</p> <p><i>Could be adapted to a inter-professional model</i></p>	<p>Located in urban centres and on First Nations. In urban areas may be main place for primary health care. Access for women without an ongoing FP</p> <p>RNs practise to full scope for pre and postnatal care freeing up intrapartum care providers</p> <p>Facilitates care integrated with cultural beliefs. Supports women giving birth with Aboriginal RMs</p> <p>Supports the OMCEP principles for birth close to home, as a normal physiological process, continuity of care and possibly carer, culturally appropriate.</p> <p>Remuneration for care providers by salary/blended models in a joint federal provincial program. May be best supported by harmonized payment model for multi and inter-professional practice.</p>

**New and Innovative Models of Maternity Care:
Inter-professional - Regional**

Model Name/ Intrapartum Care Provider	Model Description	Clinical Care	Providers in Model	Opportunities for Shared or Call or Collaboration	Community, Population and Institutional Issues
<p>Inter-professional Collaborative Care across region in both large and small hospitals/centres</p>	<p>Team provides full services across continuum of maternity care. Low & high-risk pregnancy</p> <p>Team practice in which each care provider practises to full scope; Includes psychosocial as well as clinical support. Care by or referral to specialists, including OBs, Maternal Fetal Medicine and other consultants as part of team.</p> <p>Woman may choose/be assigned to a specific team or provider.</p>	<p>Woman registers with service and has choice of inter or single professional team to see her through pregnancy. Antenatal care by FP teams or FP and RN(EC) partnerships; RM teams; OBs teams with RN(EC)s to provide educational prenatal care; or RN(EC) teams. Could use Centering Pregnancy group prenatal care approach. Possibility of having labs, ultrasounds and other consultants seen on-site.</p> <p>If woman assigned to inter-professional team, FP, OBs or RM on-call from that team provides care that day with RN assisting. If complications, transfer to a consulting OB.</p> <p>RMs can provide births and postpartum care in home. All women followed for at least 6 weeks postpartum by antenatal team. After 6 weeks, ongoing care provided by regular FP, public health nurse where available, well-baby or Early Years or other parenting support</p>	<p>FPs, RMs and OBs providing full continuum of care. (some FPs may only provide prenatal and postpartum care only).</p> <p>OBs as consultants when needed for high-risk care are part of team.</p> <p>RN(EC)s or RNs provide prenatal and postpartum care and some support during intrapartum care. PHNs where available.</p> <p>Paediatrics/Maternal Fetal Medicine experts and other specialists as needed</p>	<p>Inter-professional and Collaborative.</p> <p>Shared care systems and shared on-call systems, teams have shared philosophy and practice guidelines. Size of team and ratio of care providers can vary with size of community – all teams have both primary and consultant care providers. f FP/OB/RM/RN(EC)/RN</p> <p>Each team, would however, have a common base of services, though in smaller rosters some of the services may have to be delivered by outside referrals, consultants, use of remote technology, suitable for high and low volume – but must be scaleable to community above 4-5 providers.</p> <p>Allows for evolution of more than one kind of team based on community resources/needs.</p>	<p>Appropriate for any mid- or large-sized community hospital. Teams in small community settings can partner with regional hospitals nearby to create a larger umbrella of services for women.</p> <p>Community retains the skills of those who want to do prenatal/postpartum care and protects the time of those who do intrapartum care.</p> <p>Communities with limited numbers of practitioners and mix of practitioners can “share” the prenatal and postpartum work and protect the time/energy of those wishing to provide intrapartum care for that service alone All-in-one service in the Centre, including for OB care.</p> <p>Home births possible where RMs are on teams. Inter-changeability of low care risk providers.</p> <p>With assigned team: no continuity of carer. Designed to be a complete service in a community so care would be close to home.</p>

Ontario Maternity Care Expert Panel
Appendix C– Models of Maternity Care
**Innovative Models of Maternity Care:
Multi-professional/Inter-professional**

Model Name/ Primary Intrapartum Care Provider	Model Description	Clinical Care	Providers in Model	Opportunities for Shared Call or Collaboration	Community, Population and Institutional Issues
Family Health Team FHT) ⁶	<p>Provide care in keeping with FHT philosophy</p> <p>Services across the continuum of maternity care and 24/7 coverage.</p> <p>May work together in one setting or multiple settings</p> <p>Births in hospital if with FP and RM. Choice of birthplace with RMs. OB consultation as needed.</p> <p>Low-risk maternal and newborn care within scope of provider</p> <p>Volume depends on size of FHT and number of intrapartum care providers</p>	<p>Prenatal and postnatal care could involve FPs, RN(EC)s and/or RMs</p> <p>Primary intrapartum care provider: FPs and/or RMs. RNs work with FPs and RMs during intrapartum or postpartum period</p> <p>Other FHT members would play roles as appropriate</p> <p>FHT that doesn't provide intrapartum care may collaborate with FHT that does</p>	<p>FPs</p> <p>RMs</p> <p>RNs</p> <p>RN(EC)s</p> <p>Access to full range of FHT members as needed as part of either multi or inter-professional team e.g., nutritionist, social work, pharmacist</p> <p>OBs and other consultants if referral needed</p>	<p>Each FHT would design its own model of care and call system</p> <p>If multi-professional team where FPs do not do intrapartum FPs/RN(EC)s in FHT refer to group of RMs for shared prenatal and intrapartum care. Care back to FPs/RN(EC)s for shared postpartum care</p> <p><i>Inter-professional team could involve shared prenatal and intrapartum care and on-call coverage with FP/RM team</i></p> <p><i>Care could also be organized around choice of intrapartum care provider: with FHT offering access to care by FP team, RM team or OB team</i></p>	<p>Mix & availability of care providers determined by community.</p> <p>Flexible to large or small communities</p> <p>Services close to home for small communities.</p> <p>Ideal for low-risk women when FPs and RMs provide care for uncomplicated pregnancies.</p> <p>Supports FPs and RMs in balancing their workload and stress.</p> <p>Continuity of care within the team/group practice Shared on-call may free up ability to service larger number of women or even protect a service at risk of closing. May or may not include continuity of carer depending on-call system</p> <p>See Guidelines for funding FHT services – may be a mix of methods⁷ May be best supported by harmonized payment model for multi and inter-professional practice.</p>

**Established Models of Maternity Care:
Multi-professional/Inter-professional**

Model Name/ Primary Intrapartum Care Provider	Model Description	Clinical Care	Providers in Model	Opportunities for Shared Call or Collaboration	Community, Population and Institutional Issues
<p>Community Health Centres (CHCs) - Ontario)</p>	<p>Variation A: CHC provides primary care to own patients and those without an ongoing FP, including pre and postnatal care, can provide care to non-status immigrants</p> <p>Intrapartum providers accessed on staff or by referral</p> <p>Low-medium risk</p> <p>Birth in hospital (or in home if with RM)</p>	<p>Variation A: CHCs: prenatal and postpartum care from multi-disciplinary team, including risk assessment, well woman and newborn care, education and counselling on pregnancy, labour, birth and baby care.</p> <p>Primary intrapartum care provider: RM, FP or OB - referral may be at various points – often referral to OBs at 36 weeks</p> <p>Centres often hold drop-in support groups and breastfeeding counseling</p>	<p>Depends on community needs and funding. Providers may include:</p> <p>FPs;</p> <p>RMs</p> <p>OBs</p> <p>RNs</p> <p>RN(EC)s</p>	<p>Highly inter-professional model involving several groups.</p> <p>More collaborative for prenatal and postpartum than for intrapartum care.</p> <p><i>Could be multi or inter professional model</i></p>	<p>Mix & availability of care providers determined by community.</p> <p>A: Continuity of care within the team/group practice but not always continuity of carer. B: Continuity of carer</p> <p>An:RNs practise to full scope for pre and postnatal care freeing up intrapartum care providers</p> <p>Ideal for women considered psychosocially high-risk because of other services right on-site. Since CHS and CLSCs are based in certain communities and neighbourhoods, they can be adapted for each and so be culturally appropriate.</p> <p>Birth centres can offer visible support for normal birth and low-risk approaches to care</p> <p>Remuneration for CHC staff salary including intrapartum care or separate intrapartum care fee for service for MDs, per course of care for RMs. May be best supported by harmonized payment model for multi and inter-professional practice.</p>
<p>Centres Locaux de Services Communautaires (CLSCs : Quebec)</p>	<p>Variation B: CLSCs similar to Community Health Centres but, unlike Ontario midwifery in which midwives are contractors, RMs in Quebec are employed by CLSCs and clients may choose to give birth in birthing centre located in or affiliated with CLSC</p>	<p>Variation B: CLSCs: offer care as above but also offer RM-led care for pre, intra and post partum care within multi-disciplinary team –choice of birth in birthing centres, home birth or hospital if with RM</p>	<p>OBs and other consultants if referral needed</p>		

**Innovative Models of Maternity Care:
Inter-professional**

Model Name/ Primary Intrapartum Care Provider	Model Description	Clinical Care	Providers in Model	Opportunities for Shared Call or Collaboration	Community, Population and Institutional Issues
<p>Remote Midwifery Service Within Inter-professional Team</p>	<p>Based on Nunavik model¹⁰</p> <p>RM-led inter-professional model for remote communities,</p> <p>Transfer by air. Consultation with FPs on site or in Level I hospital. Consultation with obstetrics or paediatrics by distance technologies and by medevac as needed. Biannual visit by OB to communities.</p> <p>Low and high-risk care of all pregnant women and babies in community. Low-risk birth in community – academic and clinical education for local women built into model</p> <p>Can work in communities with volumes of 30 births or even less if RMs work in extended role and usually up to 100 births per year</p>	<p>RMs or RNs provide pregnancy tests, prenatal care and education regardless of a woman’s risk status. FPs see all women and perform an early history and physical and give input to care plan appropriate to level of risk.</p> <p>Care plan for all women reviewed at 34 weeks by inter-professional team to determine care recommendations and birth location.</p> <p>Primary intrapartum care providers: two RMs and/or a RN attend each birth as available</p> <p>Women in communities with no birth centre transferred to closest birth centre at 37 weeks.</p> <p>Postpartum care by RMs and RNs in own community. FP resumes care at 8 weeks unless concerns.</p> <p>RMs have expanded roles and scopes in the areas of community health and emergency care. They provide well woman and well baby care, and play an active role in sexual health and health education an promotion</p>	<p>RMs</p> <p>RNs</p> <p>FPs</p> <p>Inter-professional education as part of service</p> <p>OBs and other consultants On site clinic q 2-6m and distance consult/transfer if referral needed</p>	<p>Collaborative model: Collocation of all providers. Shared care by most appropriate care providers. Team meetings and team review of all cases</p> <p>Can assist health systems to respond to community desire to bring birth back to small communities and education of local care providers .to provide care in local language and culture</p> <p>Supports RNs to maintain intrapartum skills in remote settings</p> <p><i>Variations: approach to community based education for aboriginal RMs could be integrated in other non-remote settings</i></p>	<p>Rural and remote areas and/or for aboriginal communities .</p> <p>Allows women to receive care in their own communities, language and culture. Supports women giving birth with aboriginal RMs, supports Midwifery education in local communities</p> <p>RMs practise to their fullest scope and free RNs and MDs to meet other needs in communities where resources are scarce – can assist in recruitment of physicians to remote community who do not do intrapartum care</p> <p>Supports the OMCEP principles for birth close to home, as a normal physiological process, continuity of care and carer, culturally appropriate.</p> <p>RMs, RNs and physicians are employees of local health centres on salary May be best supported by harmonized payment model for multi and inter-professional practice.</p>

**New and Innovative Models of Maternity Care:
Inter-professional**

Model Name/ Primary Intrapartum Care Provider	Model Description	Clinical Care	Providers in Model	Opportunities for Shared Call or Collaboration	Community, Population and Institutional Issues
<p>Inter-professional Collaboration Maternity Centre</p>	<p>Adapted from Hamilton Maternity Centre¹¹</p> <p>Maternity Centre with services across the continuum of maternity care and 24/7 coverage.</p> <p>Intrapartum care in hospital (Level I, II or III)</p> <p>Primarily, but not exclusively, for low-risk women and newborns. Consultation with OB as required</p> <p>Allows for relatively high volume FP maternity care</p>	<p>RN(EC) coordinate all stages of pre and Postpartum care. RN(EC) or FP provide Prenatal care and education.</p> <p>Roster of FPs who take turns seeing women For prenatal care requiring a physician check.</p> <p>Primary intrapartum care provider: FP on hard-call system 24 hours for Deliveries. Nursing care by staff RN during Intrapartum and postpartum.</p> <p>If complications develop, transfer to an OB at a Level II or III hospital.</p> <p>RN(EC) provides one visit post partum in the Hospital. Post partum care is then provided by own FP or Maternity Centre FP if women requests</p> <p>Shared care model.</p>	<p>RNs</p> <p>RN(EC)s with FPs.</p> <p>OBs and other consultants if referral needed</p>	<p>Hard call system to support work-life balance and encourage FPs to participate in maternity care. Amount of on-call depends on size of group and call system</p> <p>Highly collaborative model with shared philosophy of care policy and protocols and team meetings</p> <p>Collaborative systems and on-call arrangements helped retain providers and recruit new ones</p> <p><i>Could also include RMs, obstetricians and others in inter-professional team or in multi-professional environment</i></p>	<p>Located in an urban setting but could be duplicated in mid-size community, or scaled down for smaller community.</p> <p>Provides continuity of care but not carer. Supports a primary care model and birth as normal physiological process</p> <p>RNs practise to their full scope for pre and postnatal care freeing up intrapartum care providers</p> <p>Visible primary maternity centre can offer support for normal birth and low-risk care providers</p> <p>Relatively high volume predictable practice maintains both confidence and lifestyle and supports recruitment and retention</p> <p>Fee for service APPs and salary systems combined. Could be organized as FHT. Salary for RNs in hospital</p>

**New and Innovative Models of Maternity Care:
Inter-professional**

Model Name	Model Description	Clinical Care	Providers in Model	Opportunities for Shared Call or Collaboration	Community, Population and Institutional Issues
<p>Inter-professional FP and RM practice</p>	<p>Adapted from Children’s & Women’s Health Centre of BC. Primary Maternity Care Model²</p> <p>Provide services across the continuum of maternity care and 24/7 coverage.</p> <p>A FP and RM group practice for women whose regular FP does not provide intrapartum care. 24-hr on-call system for maternity issues</p> <p>Low-risk care for women and newborns whose regular FP does not provide intrapartum care.</p> <p>Volumes vary with size of team</p>	<p>FPs and/or RMs work together in a clinic and share clinic hours and prenatal care. A primary caregiver is assigned to each woman, preferably introducing her to a second team member who shares clinic hours. Woman and family meets the entire team at a “Meet the RMs and Doctors Night”</p> <p>Primary intrapartum care provider: 3-8 practitioners share call equitably on a 24-hour call schedule. One RM or doctor attends all calls in that 24-hour period. Woman may not have her prenatal provider for intrapartum care Nursing care by staff RNs during intrapartum.</p> <p>One postpartum visit by intrapartum provider with nursing care during postpartum stay and then woman and infant referred back to regular FP or health clinic</p>	<p>Any configuration of FPs and RMs,</p> <p>RNs</p> <p>OBs and other consultants if referral needed</p>	<p>Shared Call in hard call system</p> <p>Amount of on-call depends on size of group and call system up to 6-8 suggestion to make shared call system work.</p> <p>Inter-professional sharing or collaboration for prenatal and intrapartum care. Amount of collaboration may vary with practice but ideally members have shared values and commitment and team meetings</p> <p><i>Variations include extending postpartum care before referring back to previous provider-can be applied with different call systems</i></p>	<p>Any size community that contains 3-6 providers committed to shared and/or collaborative care. Could be several groups in urban centres. This team practice can maintain a maternity service at a smaller, low volume hospital, preventing provider burnout and the loss of a region’s local maternity care.</p> <p>Provides some continuity of care within the team but often not continuity of carer. Supports work-life balance and limits on-call for care providers.</p> <p>Limited postpartum follow-up. Ideal for women with strong regular FP support or tie-in with a community health clinic.</p> <p>Fee for service remuneration norm with some APPs and salary systems for MDs. Course of care payment for RMs. Salary for RNs May be best supported by harmonized payment model for multi and inter-professional practice.</p>

**New and Innovative Models of Maternity Care:
Inter-professional**

Model Name	Model Description	Clinical Care	Providers in Model	Opportunities for Shared Call or Collaboration	Community, Population and Institutional Issues
Birth Centres for Inter-professional Education and Practice	<p>Birth Centre affiliated with education programs and teaching hospitals</p> <p>Services across the continuum of maternity care and 24/7 coverage.</p> <p>Inter-professional care team Providers can be on staff as part of birth centre core team or hold privileges to attend births at centre</p> <p>Low-risk mothers and babies < 24 hour stay in centre and f/u home visits</p> <p>Transfer to hospital if indicated and/or intrapartum consultation with OB needed</p> <p>Could be high or low volume –higher volume supports student experience (300-500 births per year)</p>	<p>Various possibilities depending on team mix, agreement, and population being served</p> <p>Prenatal care is on site by birth centre core team of RN(EC)s, FPs and RMs, or by community provider who has privileges at the centre.</p> <p>Primary intrapartum care provider: FP or RM team member if primary unavailable. RNs on-call for labour care with FPs and/or RMs</p> <p>Postpartum care in centre by intrapartum provider with RN or RN(EC) with continuity from pre or intrapartum.</p> <p>Postpartum home visits by RN/RN(EC) and/or RMs.</p>	<p>FPs</p> <p>RMs</p> <p>RN(EC)s</p> <p>RNs</p> <p>Public Health Nurses</p> <p>OBs and other consultants if referral needed</p>	<p>Opportunities for shared care are determined by the needs and preferences of the care-providers and community</p> <p>Various call systems possible. Amount of on-call depends on size of group and call system</p> <p>Shared philosophy of care, policies and protocols or shared team meetings for core team and liaison with all care providers with privileges</p> <p>Excellent opportunities for inter-professional education and education for normal birth</p> <p><i>Many variations possible: a birth centre could be multi-professional, inter-professional or midwifery-led, family practice</i></p>	<p>Medium to Large Urban Setting. Affiliated with teaching programs and hospitals</p> <p>Scalable to high and low volume</p> <p>Continuity of care, continuity of carer Depends on-call system</p> <p>Supports OMCEP principles of choice of birthplace, care close to home and birth as a normal physiologic process and inter-professional education</p> <p>RNs practise to full scope for pre and postnatal care freeing up intrapartum care providers</p> <p>Ideal for women with low-risk medical needs but can accommodate women with low or high-risk social or mental health needs. Ideal for learning and teaching about normal intrapartum care</p> <p>Remuneration may be through global budget and/or fee for service for MDs and course of care fees for RMs</p>

Bibliography

1. Lofsky S, Adamson M. Changing trends in obstetrical physician resources in Ontario 1992-2003. Report to "Babies Can't Wait". 2005 Mar.
 2. Price DJ, Lane C, Klein MC. Maternity care by FPs: characteristics of successful and sustainable models. *JOGC* 2005 May;27(5):460-66.
 3. Ontario Midwifery Program, Ministry of Health and Long-Term Care.
 4. College of RMs of Ontario. Exemption for Aboriginal RMs. 1994 Jun. Available from: <http://www.cmo.on.ca>
 5. College of RMs of Ontario. Continuity of care. 1994 Jun. Available from: <http://www.cmo.on.ca>
 6. Ministry of Health and Long-term Care. Family health teams [public information]. Available from: <http://www.health.gov.on.ca>
 7. Ministry of Health and Long-term Care. Family health team: Guide to inter-professional provider compensation. 2006 Feb 28. Available from: <http://www.health.gov.on.ca>
 8. The South Vancouver Birth Program: A new model of maternity care. Collaboration for Maternal and Newborn Health Conference: Maternity Care in the 21st Century. Vancouver; 2005 Feb.
 9. Rising SS. Centering pregnancy: An inter-professional model of empowerment. *Journal of Nurse-Midwifery* 1998 Jan/Feb;43(1):46-54.
 10. Epoo B, Nastapoka U, van Wagner V. Bringing birth back to the community: Midwifery in the Inuit villages of Nunavik. Proceedings of the International Confederation of RMs, July 2005.
 11. Price D, Howard M, Shaw E, Zazulak J, Waters H, Chan D. Family medicine obstetrics: collaborative inter-professional program for a declining resource. *Canadian FP* 2005 Jan;51:68-74.
-