

BRITISH COLUMBIA
REPRODUCTIVE CARE PROGRAM

REPORT ON THE FINDINGS OF
A CONSENSUS CONFERENCE
ON OBSTETRICAL SERVICES
IN RURAL OR REMOTE
COMMUNITIES

HELD IN VANCOUVER, BC
FEBRUARY 24TH – 26TH, 2000

CONSENSUS SYMPOSIUM SUMMARY

CONTENTS

1. BACKGROUND AND OVERVIEW
2. DISCLOSURE AND INFORMED CONSENT
3. SYSTEM PLANNING AND CO-ORDINATION
4. CLINICAL DECISION-MAKING
5. FACILITIES AND EQUIPMENT
6. PROVIDERS
7. COMMUNICATION AND PEER SUPPORT
8. RISK MANAGEMENT
9. OUTCOME EVALUATION AND MONITORING
10. CONSENSUS STATEMENTS

APPENDICES:

- A: PROVIDER COMPETENCIES
- B: FACILITIES AND EQUIPMENT DETAILS
- C: BIBLIOGRAPHY
- D: LIST OF ATTENDEES

CONSENSUS SYMPOSIUM SUMMARY

BACKGROUND

The British Columbia Reproductive Care Program (BCRCP) is a provincial program whose mission is to optimise Maternal/Foetal/Infant health. Its mandate includes consultation with perinatal care providers, promotion of education and care networks, guidelines for patient care and the development and maintenance of the British Columbia Perinatal Database Registry.

There are at least 30 hospitals in B.C. that have ceased to offer maternity services, or which do not have full time Caesarean Section capability. Over several years, the BCRCP has received requests for guidance from several of these latter sites regarding the level of obstetrical service generally considered acceptable without operative delivery capability. One question that was consistently asked was whether nulliparous women should be allowed to labour and deliver at such a site. In response to these questions and others the BCRCP convened a Consensus Symposium on February 24 to 26, 2000 where perinatal providers, experts and regional representatives were invited to answer the following two questions:

- *Is it safe for apparently low-risk women (i.e., at no appreciable risk) to labour and deliver in their home communities (thereby minimizing disruption of family and community) when there is no on-site C/Section capability?*
- *Assuming it is reasonable and good practice, what risk management strategies should be adopted in order to provide optimal care for both mother and newborn? What are the minimum requirements?*

By consensus, we agreed to broaden our debate to include considerations having to do with small/rural communities *with or without C/s capability*, electing to focus on general risk management strategies for such communities

Attendance was by invitation only; our purpose being to bring together those persons who by reason of professional affiliation, research/educational pursuit or government appointment could inform this debate and assist us in the pursuit of a common solution. Two regional delegates were solicited from each of the health regions and they were joined by invited faculty from UBC and BCIT, representatives of the Ministries of Health, Children and Families and Skills and Training, and other expert stakeholders. Delegates represented not only their region, but also the facilities within their region or CHSS. Individual representation was secured from the College of Physicians and Surgeons of BC, the College of Family Physicians of BC, the College of Midwives of BC, the Society of Rural Physicians of Canada (SRPC), the Society of Obstetricians and Gynaecologists of Canada (SOGC), the BC Public Health Nursing Council and the Registered Nurses Association of BC.

The following paper is a review of the discussion and summary of the consensus reached at the meeting.

CONSENSUS SYMPOSIUM SUMMARY

OVERVIEW

Rural hospitals should, within a regionalized, integrated risk management system, offer maternity care to a low-risk population. The evidence suggests that a local, rural maternity service, even if limited in scope, offers better outcomes than no maternity service. While anaesthetic and surgical services are desirable, the available evidence suggests that good outcomes can be sustained without local access to operative delivery.

The capacity (or not) to provide a local operative delivery service has led to a number of rural communities electing to transfer many women, especially nullipara, for birth elsewhere. This is based on the assumption that this group, in particular, represent a higher level of risk and require a higher intensity of care than multipara. The evidence however, suggests that the nullipara is no more likely to require urgent C/S than the multipara. The same principles of risk management apply to client selection for operative birth in all sites in a regionalised perinatal system, where a proportion of women identified *a priori* as being high risk, are transferred to those facilities offering a higher level of care. An effective patient selection/screening process must be in place, backed up by an organised audit and feedback program.

With these principles in mind, lack of on-site C/S capability should not constitute a reason for withdrawing obstetrical services for low risk women. In addition, C/S capability should be maintained where it exists and consideration given to *adding* this capability where appropriate and feasible within the context of a regional maternity care plan. The existence of local C/S capability can allow more women to receive appropriate care in or near their community and obviate some of the negative social effects of elective transfer.

There is a need to sustain and restore the availability of maternity services in smaller, rural communities. The loss of maternity services is not inevitable or irreversible. The joint position of the SOGC, the SRPC and the CFPC is that maternity care should be provided as close as possible to the rural patient's home location, within the limits of safe practice; regardless of on-site C/S support, women in rural communities achieve better delivery outcomes when cared for by local intrapartum programs. There must be an integrated initiative to support the physical, administrative and practitioner environments that make these services available. This involves issues such as maintaining a complement of adequately trained nurses, physicians and midwives, appropriate equipment for labour and birth, an efficient system of emergency transport for mothers and infants and, of course, funding support.

Convinced by the evidence of several position papers (see Appendix C) and the deliberations of the two-day consensus focus groups, the conference attendees supported the continuation of these essential services to childbearing women in BC under the following circumstances:

CONSENSUS SYMPOSIUM SUMMARY

DISCLOSURE AND INFORMED CONSENT

Community residents should be aware of the level of service offered and the system of care of which the local service is part. When discussing the options for care during pregnancy and delivery, the mother and her family need to be informed of the advantages, limitations and risks of local maternity care services as well as those of travelling for care. It should also include estimates of how likely that a low risk woman at the start of her pregnancy will:

- remain a candidate for delivery at the local hospital by the end of her pregnancy
- require transport to another hospital during labour for a non-life threatening condition (e.g. dystocia)
- require transport to another hospital with a life threatening condition that might result in serious morbidity or mortality for the mother or her infant (e.g. abruptio placentae, cord prolapse etc.)

This will allow the woman and her family to make an informed choice in the light of her circumstances.

Current information should be disseminated to the community to allow women to consider their options with respect to place of delivery. Caregivers should be assisted in the process of disclosure by the local hospital and the community it serves. Such disclosure should begin early in antenatal care and should occur throughout the antenatal education program and at the caregiver's office. Documentation should be developed, unique to the local perinatal service, to summarise the information and give the expectant family an opportunity to formally record their informed consent prior to the onset of labour.

SYSTEM PLANNING AND CO-ORDINATION

Each community, including regional planners and the local perinatal team, must determine its own capabilities and the limitations of the local maternity services. This includes deciding which specific cases (including both maternal and newborn care) are appropriate to be undertaken in the community; all decisions should reflect evidence of best practice

Even with exemplary planning, some women and their infants will inevitably develop problems requiring a higher level of care than available in the local community. An integrated and well co-ordinated transport service is critical to ensure an appropriate level of care is available. Participants raised concerns particularly about regional/local transfer where there was seldom any transport infrastructure in place. Care providers were often unaware as to how to access such services and lacked expertise in understanding the issues related to transport. The appointment of Local Transport Advisors, familiar with the Ambulance Service and patient needs, was recommended.

CONSENSUS SYMPOSIUM SUMMARY

The development of standards was considered important. Good communication was emphasised particularly between referring physicians/midwives and the receiving physician. Finding competent escort personnel is often a problem in a small community particularly when the Family Practitioner may be the only physician on call in the community. Such problems are further exacerbated when the escort personnel are left to find their own way home at the end of the transport.

Transfer by the high-risk maternal and new-born transport team in BC is generally well organised. However occasionally those involved in the organising of a transport had a poor understanding of local geography and were not always responsive to potential local solutions. Improved receptivity to local input was felt to potentially expedite the woman, in particular, receiving an appropriate level of care more rapidly.

CLINICAL DECISION-MAKING

While the evidence indicates that nulliparous women will require transfer for caesarean section (primarily for Dystocia) more often than multiparous women, they are no more likely to require urgent caesarean section than multiparous women. Therefore, nulliparity is not a reason to exclude a woman from delivery in her community that lacks caesarean section capability.

Augmentation (with Oxytocin) and/or induction of labour (by artificial rupture of membranes, Prostin gel or Oxytocin) may be offered in communities without local caesarean section capability. If caring for a woman in labour is appropriate in the community, then caring for her augmented/induced labour is equally appropriate when there is support by trained local staff and resources. The decision to support induction of labour in a rural community setting must be made with an awareness of the increased likelihood of C/section and therefore the need for the availability of support services.

Regional analgesia may be offered to women in the absence of local caesarean section capability where this can be supported by local staff and resources.

Hospitals offering planned VBAC should be capable of providing emergency caesarean section.

The conference delegates supported the continued development and dissemination of **practical** clinical management guidelines (SOGC, BCRCP), including documented transport protocols and communication pathways.

FACILITIES and EQUIPMENT

Hospitals providing planned maternity services must have suitable equipment available, as well as processes for emergency triage and transfer. See Appendix B

CONSENSUS SYMPOSIUM SUMMARY

PROVIDERS

The primary consideration for perinatal care providers is that **team competency** is required. Competency of the individual practitioner or discipline is insufficient to offer a consistent service. See Appendix A

COMMUNICATION AND PEER SUPPORT

Delegates shared the professional, intellectual and emotional isolation experienced by health care providers in remote areas. They endorsed the availability of advice (clinical and administrative) via both local and regional networks between all levels of service providers. Telephone consultations to Level 3 centres should be maintained, with person to person advance notice of impending problems where possible.

Electronic links such as e-mail, as well as internet search capabilities should be available at all sites providing maternal/new-born care.

RISK MANAGEMENT

A formally documented risk management strategy should be developed for each rural maternity service. It should include processes to identify, assess, and manage risk; it must also utilise appropriate continuous quality improvement strategies to evaluate its effectiveness. Policies of disclosure and informed consent should also be developed

An effective risk management program for communities without local operative delivery is the acquisition of these services where they could be supported by caregivers and the community. The support thus provided to the care providers and the reduction in outflow will help sustain the local maternity care service.

Note: There was an extensive discussion around the issue of risk identification as it relates to risk scoring. There was no consensus on whether or not it helps to diminish untoward events. Risk management, on the other hand, was strongly advocated by all representatives.

OUTCOME EVALUATION and MONITORING

Outcomes, both for individual cases and for the maternity population of the entire community, should be documented and reviewed on a regular basis. This requires a perinatal database that is based on the residence of the mother and the institution(s) where she received care, and a reporting system based on the catchment areas of the rural hospitals.

The capability (or not) of caesarean section alters the pattern of risk litigation. Careful outcome analysis, including perinatal mortality and morbidity audit will allow care providers to carefully plan and revise delivery systems on an ongoing basis.

CONSENSUS SYMPOSIUM SUMMARY

Consensus Statements

1. Women in Canada who reside in a rural community should receive high quality maternity care. Evidence suggests that the presence of a local rural obstetrics service, even if limited in scope, offers better outcomes for mothers and new-borns than no service.
2. While local anaesthetic and surgical services are desirable and would allow more women to receive appropriate care in their community, the available evidence suggests that good outcomes can be sustained within a regionalized risk management system without local access to operative delivery.
3. Where adequate human and physical resources are present, each woman who can anticipate a safe birth in a rural community should be supported by physicians, midwives and nurses with local access to advanced maternity skills, including Caesarean section . Existing hospitals with Caesarean section capability should work to sustain this service.
4. Each community, including planners and the perinatal care team, must be involved in high level system -planning and decision -making to determine the capabilities and limitations of the local maternity service. This will include deciding which specific cases (both maternal and new-born) are appropriate to be undertaken in the community. This should reflect evidence of best practice.
5. While the evidence indicates that nulliparous women will require transfer for caesarean section more often than multiparous women, they are no more likely to require urgent caesarean section than multiparous women. Therefore, nulliparity is not a reason to exclude a woman from delivery in her community that lacks caesarean section capability.
6. Augmentation of labour may be offered in communities without local caesarean section capability. If caring for a woman in labour is appropriate in the community, then caring for her augmented labour is equally appropriate when there is support by trained local staff and resources. Caution should be exercised in augmenting the labour of a multiparous woman who arrests in the active phase, given the increased likelihood of caesarean section for dystocia.
7. Induction of labour, for appropriate indications, may be offered in communities without local caesarean section capability. If caring for a woman in spontaneous labour is appropriate in the community, then caring for her induced labour is equally appropriate when there is support by trained local staff and appropriate resources. Providers must be aware of the increased likelihood of C/Section and therefore the need for the availability of support services.

CONSENSUS SYMPOSIUM SUMMARY

8. Regional analgesia may be offered to women in the absence of local caesarean section capability where this can be supported by trained local staff and resources.
9. Hospitals offering planned VBAC should be capable of providing emergency caesarean section.
10. A formally documented risk management strategy should be developed for each rural maternity service. It should include processes to identify, assess, and manage risk. It must also utilise appropriate continuous quality improvement strategies to evaluate its effectiveness.
11. When discussing the options for care during pregnancy and delivery, the mother and her family need to be informed of the advantages, limitations and risks of local maternity care services as well as those associated with travelling for care; this exchange of information should be documented in the prenatal record. Dialogue of this type will allow the woman and her family to make an informed choice in the light of her circumstances.
12. Written information, reflecting the services available in a particular community should be provided to the expectant woman and her family in order to give them an opportunity to understand their options prior to delivery. Disclosure should begin early in antenatal care and should occur throughout the antenatal education program and at the caregiver's office. The chance of requiring emergency transport in labour, the rare possibility of a catastrophic event and the implications of moving out of the community to give birth should all be clarified. Caregivers should be assisted in the process of disclosure by the local hospital and the community it serves.
13. Basic competencies for Physicians, Midwives and Registered Nurses must be established *a priori* and maintained.
Practitioners must be able to cope with the following conditions:
 - Spontaneous term singleton vertex labour and birth
 - Management of dystocia in the 1st and 2nd stages of labour by non-pharmacological and pharmacological (including oxytocin) means
 - Foetal Surveillance/monitoring
 - Augmentation and induction of labour, for appropriate indications, where this can be supported by trained local staff resources
 - Intrauterine/extruterine resuscitation
 - Outlet and low vacuum extractor or forceps assisted deliveries
 - Management of shoulder dystocia
 - Basic neonatal resuscitation including intubation and management of meconium
 - Repair of laceration or episiotomy
 - Manual removal of placenta
 - Management of post-partum hemorrhage
 - Examination and care of the newborn

CONSENSUS SYMPOSIUM SUMMARY

14. Maintenance of competence should be assured by
 - interdisciplinary standards – ie 1:1 nursing care in labour (Standard is a standard)
 - professional responsibility for continuing education
 - mentoring
 - specific workshops/certification – ALARM/ALSO/ NRP
 - transferability and recognition of advanced competencies
15. Any decision regarding the provision of maternity services is a multidisciplinary one. This requires interdisciplinary communication and co-operation
16. Where it is feasible, opportunities should be explored for inter-community (geographically close) and /or regional sharing of resources
17. There is general support for equipment guidelines outlined in Health Canada's National Maternal/Newborn Family Centered Guidelines (April 2000) and the BC Intermediate Perinatal Care Task Force (1993). See Appendix B
18. Prearranged systems for co-ordination/co-operation between sites are essential:
 - Agreements with neighbouring referral facilities
 - need for referring physician/ midwife to talk directly with the physician to whom the woman or her new-born is being referred
 - Communication systems – Internet, Tele-health, email – for education, reference and consults
19. The delivery of safe perinatal care in any community is facilitated by a well co-ordinated, integrated transport service capable of transferring a woman or her new-born in a safe and expedient manner. Care providers, hospital managers (local, regional and tertiary) together with local and provincial ambulance services are critical to the development and implementation of the transport infrastructure. Issues, which need to be addressed, are:
 - development and implementation of clinical guidelines for transfer;
 - consideration of using local and provincial transport advisors/coordinators;
 - use of competent escort personnel and return of such personnel back to their own community;
 - transport equipment, supplies and maintenance.
20. Outcomes, both for individual cases and for the maternity population of the entire community, should be documented and reviewed on a regular basis. This requires a perinatal database that is based on the residence of the mother and the institution(s) where she received care, and a reporting system based on the catchment areas of the rural hospitals.

CONSENSUS SYMPOSIUM SUMMARY

APPENDIX A

PROVIDERS

The primary consideration for perinatal care providers is that **team competency** is required. Competency of the individual practitioner or discipline is insufficient to offer a consistent service.

Practitioners should have the skills to cope with the following conditions:

- Spontaneous term singleton vertex labour and birth
- Management of dystocia in the first and second stages of labour by non-pharmacological and pharmacological means (including oxytocin)
- Augmentation and induction of labour, for appropriate indications, where this can be supported by trained local staff and resources
- Foetal Surveillance/monitoring according to national standards
- Intrauterine/extruterine resuscitation
- Outlet and low vacuum extraction or low forceps-assisted deliveries
- Management of shoulder dystocia
- Basic neonatal resuscitation including intubation and management of meconium
- Repair of laceration or episiotomy
- Management of post-partum haemorrhage
- Examination and care of the new-born

CONSENSUS SYMPOSIUM SUMMARY

APPENDIX B

FACILITIES and EQUIPMENT

Hospitals providing planned maternity services must have suitable equipment available, as well as processes for emergency triage and transfer.

Physical facilities

- labour or birthing bed, stool
- lighting and auxiliary power source
- adequate ventilation and temperature controls
- emergency signal and intercom system
- patient and staff washrooms
- storage facilities including patient's personal effects
- charting area
- secure area for medications
- sphygmomanometer, stethoscope and foetoscope
- intravenous infusion sol's and mechanical pumps
- separate oxygen and suction outlets for mother and baby
- hand-washing facilities
- stretchers
- instrument table with scissors, needle driver, pickups, suture materials, gauze, drapes, towels and disinfectant solutions
- emergency tray
- vacuum extractor, outlet forceps
- equipment for inhalation anaesthesia
- clean and soiled utility room
- sterilization equipment
- infant and adult resuscitation equipment
- infant and adult weigh scale, wall clock

Diagnostic Facilities

Availability of the following :

- Hb, Hct. within 15 minutes
- Other (CBC and diff, electrolytes, LFT's etc) blood work within 60 minutes
- bacterial cultures and sensitivities within 24 – 48 hours
- ultrasound and radiography, with technician on call 24 hrs

Pharmacy

- local/regional anaesthetic solutions
- neonatal/adult resuscitation drugs (ie Narcan)
- analgesic/anti-inflammatory tablets and suppositories
- oxytocic agents (ie Syntocinon, Ergot, PgE2, Hemabate)
- narcotics/antiemetics
- nitroglycerine
- ephedrine
- laxatives/astringents

CONSENSUS SYMPOSIUM SUMMARY

APPENDIX C

BIBLIOGRAPHY

Chalmers B.

Multicultural, Multidisciplinary and Psycho-Social Obstetric Care

Journal of the SOGC, No. 80; September 1999: 975-979

Goodwin J.

The Great Canadian Rural Obstetric Meltdown

Journal of the SOGC, No. 81; October 1999: 1057-64

Iglesias S, Grzybowski S, Klein M, Gagne GP, LaLonde A.

Rural Obstetrics : Joint Position Paper on Rural Maternity Care

Can. J Rural Medicine 1998, 3(2): 75-80

and Canadian Family Physician, Vol. 44; April 1998: 831-36

and Journal of the SOGC, No.72; April 1998: 393-98

Iglesias S.

The Future of Rural Health: Comprehensive Care or Triage ?

Can J of Rural Medicine 1999, 4(1): 32-35

Joint Position paper on Training for Rural Family Practitioners in Advanced Maternity Skills and Caesarian Section

Journal of the SOGC, No.80; September 1999: 985-994

and Canadian Family Physician, Vol. 45; October 1999: 2416-22

Report of the Intermediate Perinatal Care Task Force

Prepared by the BC Reproductive Care Program, January 1993.

Report: Rural Obstetrics Survey in British Columbia

Prepared by the BC Reproductive Care Program, September 1998.

Turnell R, Iglesias S.

Induction of Labour: Rural and Urban Perspectives

Presented at the 45th Physicians in Paediatrics, Obstetrics and Gynaecology (POGO)

Conference, Saskatoon, Saskatchewan, February 12th 1999.

CONSENSUS SYMPOSIUM SUMMARY

APPENDIX D

The BCRCP would like to thank all the attendees to this conference for their dedication and interest in bringing this project to fruition.

In particular, we would like to recognise those individuals who gave of their time and expertise in the roles of speakers, facilitators and recorders. They are:

Dr. Alan Thomson, MOH, conference moderator
Dr. Bill Ehman, FP, Facilitator
Catherine Gaulton, BCHCRM, Facilitator
Mr. Ron Benson, Speaker
Dr. George Carson, Speaker
Dr. Duncan Farqueharson, Speaker
Mr. Paul Gotto, Speaker
Dr. Stefan Gryzbowski, Speaker
Dr. Stuart Iglesias, Speaker
Dr. Michael Klein, Speaker
Dr. Neil Leslie, Speaker
Dr. Rob Liston, Speaker
Dr. Margaret Pendray, Speaker
Dr. Syd Pilley, Speaker

and for the BCRCP:

Elizabeth Torr, Program Director, Facilitator
Patty Keith, Nurse Consultant, Recorder
Joan Reiter, Nurse Consultant, Recorder
Diane Sawchuck, Nurse Consultant, Recorder