



AT RISK: Perinatal Services in Southwestern Ontario

Issue Summary and Recommendations for Action

Regional Perinatal Services Project Coordinating Committee

Goal of the Regional Perinatal Services Project

To identify viable and practical strategies to ensure on-going access to appropriate perinatal care throughout the region, using a collaborative partnership approach.

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Regional Perinatal Services Project Coordinating Committee, Interim Report, March 20, 2003. Available on-line by going to www.lhsc.on.ca/isan - go to Current Projects and then click on Regional Perinatal Services Project to find the Interim Report.	

Executive Summary

This study was undertaken as a collaborative project involving all of the hospitals that provide perinatal services in Southwestern Ontario. It was initiated in the fall of 2001 in response to growing concerns about the availability of hospital-based perinatal services and, more specifically, the closure of perinatal services at several hospitals.

The goal of the project was to identify viable and practical strategies to ensure on-going access to appropriate perinatal care throughout the region, using a collaborative, partnership approach.

Data on hospital inpatient separations was retrieved from the Ministry of Health and Long-Term Care data warehouse and demographic data was collected from the Ministry of Finance. Most importantly, stakeholders (physicians, nurses, midwives and clinical managers) from all hospitals in the Southwest region currently providing perinatal services were personally interviewed.

The risk factors that were used to assess hospitals involved the following:

- Volume of births;
- Availability of fetal electronic monitoring;
- Availability of epidurals;
- Ability to support caesarean sections;
- Risk of a hospital not being able to sustain a primary (Level I) perinatal service;
- Distance to the nearest hospital providing perinatal services;
- Human resource requirements (now and pending); and
- Hospital restructuring.

The cumulative impact of the risk analysis that was undertaken, from a regional point of view, can be summarized as follows:

- Many hospitals no longer have a formal perinatal service.
- Many hospitals are 'at risk' in terms of being able to continue to have a formal service.
- Hospitals that need to be in a position to operate as fully functioning Level II¹ sites do not have the necessary resources to do so.
- There is increasing pressure on the modified Level III (Windsor) and Level III (SJHC, London) sites to take responsibility for a higher proportion of secondary (Level II) births than is appropriate. This limits their capacity to provide tertiary level care.

¹ Based on National Guidelines, hospitals that provide perinatal services are categorized according to the scope of services they offer. There are three levels: Level I (primary care), Level II (secondary care) and Level III (tertiary care). Level II sites also provide Level I care and Level III centres also provide Level I and Level II perinatal care.

Without the capacity to ensure high quality perinatal services within their defined scope of practice or service, hospitals that provide perinatal services are vulnerable. Opportunities for in-services and training in perinatal care, both general and specialized, are critical and it is important to ensure there is a capacity to provide high quality perinatal care throughout the region on an on-going basis.

There are significant opportunities to share expertise across sites in the region. Given new enabling technologies, this can now be done through web-based forums and videoconferencing, in addition to face-to-face meetings. The level and quality of expertise in perinatal care in Southwestern Ontario is very high. The staff expertise does exist to provide the training and education needed. It is vitally important that the training and education needs of the medical and allied health staff charged with the responsibility of providing perinatal care be addressed and adequately resourced.

Recommendations

The recommendations for action that have been developed focus on the following six areas:

- Organizational leadership
- Levels of perinatal care
- Contingency planning
- Training and education
- Pain management
- Measurement and evaluation

In each case, specific recommendations for action have been developed. These recommendations include the rationale for the recommendation, a statement of the kind of resources required to support implementation and the identified 'target' of the recommendation (i.e. who should be asked to become involved in its implementation).

There is a strong spirit and history of collaboration and partnership in the region of Southwestern Ontario. The ability to work together in the best interests of women, babies, and families has been a hallmark of collaborative activities to date and remains a necessary ingredient to moving forward. Sustaining and building on the strengths of the system as it currently exists is a necessary prerequisite for success. At the same time, this report highlights a number of important and significant issues in the hospital-based perinatal services system in Southwestern Ontario. It can no longer be taken for granted that perinatal services have the resources needed to be sustainable. However, if the recommendations put forward in this report are acted on collaboratively, with a clear vision and defined sense of purpose, the organization and delivery of perinatal services throughout Southwestern Ontario will be sustained and improved.

1. Background

To maximize healthy birth and future child development, a safe and nurturing environment in which to provide maternal and newborn care is important. Healthy births are key to a healthy society^{2,3}. In addition, it is well established that birth weight is a key indicator of a healthy child. Low birth weight is used as a 'marker' to assess the short and long-term health of children, and, by extension, society as a whole⁴.

It was in this context that the Family Centred Maternity and Newborn Care National Guidelines (National Guidelines) were developed. These guidelines, now in the fourth edition (2000), provide guidelines for the organization and provision of maternal and newborn care across Canada.

As a point of reference, the following Guiding Principles were developed as part of the National Guidelines.

- Birth is a celebration—a normal, healthy process;
- Pregnancy and birth are unique for each individual;
- The central objective of care for women, babies, and families is to maximize the probability of a healthy woman giving birth to a healthy baby;
- Family-centred maternity and newborn care is based on research evidence;
- Relationships between women, their families, and health care providers are based on mutual respect and trust;
- Women are cared for within the context of their families;
- In order to make informed choices, women and their families need knowledge about their care;
- Women have autonomy in decision-making. Through respect and informed choice, women are empowered to take responsibility;
- Health care providers have a powerful effect on women who are giving birth and their families;
- Family-centred care welcomes a variety of health care providers;
- Technology is used appropriately in family-centred maternity and newborn care;
- Quality of care includes a number of indicators (objective and subjective); and
- Language is important (style of language and choice of words).

² Reference: Healthy Child Development Improving the Odds: Healthy Child Development Focus on the Early Years: Neuroscience and Implications for Clinical Practice Training Program and Toolkit for Family Physicians and other Primary Health Care Providers, 2003.
http://www.opc.on.ca/beststart/pract_prod/hlthy_chld_dev/hlthy_chld_res.html

³ See the World Health Organization web site for an international perspective on maternal and newborn care. http://www.who.int/reproductive-health/pages_resources/listing_maternal_newborn.en.html

⁴ Source: Prevention of Low Birth Weight in Canada: Literature Review and Strategies 2nd Edition Prepared for the Best Start Resource Centre OPC by the Perinatal Education Program of Eastern Ontario 1999: <http://www.opc.on.ca/beststart/lbw/lbw98TOC>

The National Guidelines divide maternity and newborn care into two major parts:

- Ambulatory Prenatal Care; and
- Labour and Birth, Postpartum, and Newborn Care.

Ambulatory Prenatal Care focuses on pregnancy and is provided in a variety of settings by a variety of providers—physicians, midwives, public health nurses and others. The second part, labour and birth, postpartum, and newborn care focuses on hospitals and birthing centres and the care provided immediately before, during and after the birthing experience⁵. Hereafter, the term ‘perinatal care’ will refer to prenatal care as well as labour, birth, postpartum and newborn care.

2. Context

This study was undertaken as a collaborative project involving all of the hospitals that provide perinatal services in Southwestern Ontario. It was initiated in the fall 2001 in response to growing concerns about the availability of hospital-based perinatal services and more specifically, the closure of perinatal services at several hospitals. It was agreed, rather than taking a ‘one-off’ or piecemeal approach to the issue, that there were merits in looking at perinatal services, and hospital-based perinatal services in particular, from a regional perspective.

Stakeholders involved with providing perinatal services at hospitals around the Southwest region first met by teleconference to discuss the issues facing their programs. The meeting was called in an effort to address the fact that perinatal services at several community hospitals had recently closed and several others were identified as being at risk of closing. These closures were due to a number of factors including declining volumes⁶, shortages in anaesthetists and general surgeons to undertake caesarean sections, obstetricians, and trained nursing staff to provide intrapartum and newborn care.

To address these closures, and to ensure that women, babies, and families in Southwestern Ontario have equitable access to perinatal services, stakeholders from across the region formed the Regional Perinatal Services Project Coordinating Committee (Coordinating Committee)⁷. This committee was formed with the following goal:

To identify viable and practical strategies to ensure on-going access to appropriate perinatal care throughout the region, using a collaborative, partnership approach.

⁵ Health Canada. *Family-Centred Maternity and Newborn Care: National Guidelines*, 4th Edition. Minister of Public Works and Government Services, Ottawa, 2000. To read the guidelines go to http://www.hc-sc.gc.ca/dca-dea/publications/fcmc00_e.html

⁶ In small and rural communities throughout Southwestern Ontario, the volume of deliveries is declining due to changing demographics. See March 20, 2003 interim report for details.

⁷ See Appendix A for a list of current and past members of the Coordinating Committee.

For the last year and a half, under the leadership of the Coordinating Committee a significant amount of work has been undertaken to understand the dynamics driving the provision of hospital-based perinatal care in Southwestern Ontario. Data on hospital inpatient separations was collected from the Ministry of Health and Long-Term Care data warehouse and demographic data from the Ministry of Finance. In addition to this data, stakeholders (physicians, nurses, midwives and clinical managers) from all hospitals in the Southwest region currently providing perinatal services were personally interviewed.

In March 2003, an Interim Report was prepared and widely circulated⁸. This report detailed the findings based on the data that had been collected. The interim report included three key recommendations:

- The need to ensure that the Level III (tertiary care)⁹ perinatal service hospital site in the region (London) and the modified Level III site (Windsor) have the resources to continue providing tertiary level perinatal care;
- The need to enhance the capacity of Level II (secondary) perinatal service hospital sites to serve their immediate and referral populations; and
- The request that Level II providers in the region be asked to come together and work collaboratively to address the service delivery issues they have in common.

On June 25, 2003, a meeting of the Level II perinatal service sites took place in London. At that meeting, there was a general consensus that there were important issues that could be addressed collaboratively, without discounting the reality that there are differences among sites that also need to be addressed.

This report is designed to give stakeholders who are responsible for providing hospital-based perinatal care throughout Southwest Ontario a clear understanding of current perinatal issues and a set of recommendations for moving forward¹⁰.

3. The Organization of Perinatal Services

The National Guidelines (4th edition, 2000) propose that family centred maternity and newborn care be organized on a regional basis. 'Regionalization of Services' is described as follows:

⁸ This report is available by going to www.lhsc.on.ca/isan - go to Current Projects and then click on Regional Perinatal Services Project.

⁹ Based on National Guidelines, hospitals that provide perinatal services are categorized according to the scope of services they offer. There are three levels: Level I (primary care), Level II (secondary care) and Level III (tertiary care). Level II sites also provide Level I care and Level III centres also provide Level I and Level II perinatal care.

¹⁰ It is acknowledged that this report is limited and focussed compared to the full scope of perinatal care. Community-based programs are not addressed. For example, an important program that is not addressed in this study is the Healthy Babies, Healthy Children Program, supported by the provincial government, and delivered through community health agencies.
http://www.health.gov.on.ca/english/providers/pub/child/hbabies/implem_phase1.html

Regionalization of maternal and newborn services brings together a comprehensive organization of services to provide optimal care for women, babies and families. Central to this concept is risk assessment combined with referral to risk-appropriate services. The system of care is broadly focused on meeting the needs for appropriate services, professional education, research and evaluation (March of Dimes Birth Defects Foundation, 1993).

The National Guidelines¹¹ go on to say:

Regionalization of maternal and newborn care implies the development of a coordinated, cooperative system of care within a defined geographic area. The goals of such are:

- Provision of quality care for all women, newborns, and their families;
- Appropriate use of personnel and facilities;
- Coordination of services;
- Provision of referral mechanisms;
- Provision of professional education; and
- Incorporation of research and evaluation.

Also central to a regionalized system of care are the mutual relationships and responsibilities of the agencies providing care. The goal here is to provide appropriate care as close to home as possible for mothers, babies, and families.

The rationale for addressing perinatal care from a regional perspective is clear. First, not every community or hospital provides the same level of perinatal care. Second, there is an important and significant interdependence among the centres that provide perinatal care. This interdependence is reflected in the different levels of care, and by definition, the levels of complexity different centres have the capacity to address. Third, by looking at perinatal care from a regional perspective, it is reasonable to expect that within a region the full gamut of skills and resources would be available. Only in exceptional circumstances would women or newborns have to be transferred outside the region. As a regionally-based system of care, therefore, it is important that the process of delivering care is coordinated among sites of care and that there are clear expectations regarding the roles of different sites.

Within the province of Ontario, a voluntary partnership has been established called the Ontario Perinatal Partnership. The Ontario Perinatal Partnership is designed to be a forum for partner communication, networking, and the development of new approaches to perinatal care delivery. It is also designed to be a resource to members, government, and professional organizations. As well, it is a forum to continually assess the impact of the changing health care environment, and a liaison with other provincial and national organizations¹². Although the Ontario Perinatal Partnership provides an excellent forum for discussions on provincial perinatal issues, it does not have an official mandate, nor

¹¹ National Guidelines 4th Edition, Chapter 2 page 2.6.

¹² Ontario Perinatal Partnership, Terms of Reference, Approved as Amended, Nov. 2003.

is it recognized by the Ministry of Health and Long-Term Care as providing provincial perinatal leadership. In terms of moving perinatal care forward at the provincial level, this needs to be addressed.

It is important to note that perinatal services are not consistently organized on a regional basis throughout Ontario.

It is important to note that perinatal services are not consistently organized on a regional basis throughout Ontario. Southwestern Ontario, Eastern Ontario, and Southeastern Ontario have organized to coordinate the provision of care on a regional basis. In Southwestern Ontario, the coordination is undertaken by the Regional Perinatal Outreach Program of Southwestern Ontario (Outreach Program), www.sjhc.london.on.ca/sjh/profess/periout/periout.htm. In Eastern and Southeastern Ontario, the coordination is undertaken through the Perinatal Partnership Program of Eastern and Southeastern Ontario (PPESO), <http://www.pppeso.on.ca/english/aboutus.html>. In the Toronto area, the Child Health Network for the Greater Toronto Area, www.childhealthnetwork.com, has been organized and is currently addressing issues related to newborn care and transport.

Each of these regional groups has different financial resources, has taken a slightly different approach to the coordination of perinatal and newborn care, and has come from different starting points in terms of their organization, priorities and development¹³.

The Regional Perinatal Outreach Program of Southwestern Ontario, established in 1979, has the following long-term objectives:

- To promote regionalized perinatal care throughout Southwestern Ontario;
- To promote optimal and equitable use of perinatal services for the region;
- To decrease perinatal morbidity/mortality; and
- To promote a consistent standard of evidence-based and outcome driven perinatal care.

The role of the Outreach Program includes:

- Developing perinatal education programs for nurses, respiratory therapists, physicians, midwives and other healthcare providers in the region;
- Facilitating networking among perinatal health care providers;
- Offering consultative services concerning perinatal care to hospitals;
- Data collection; and

¹³ In Eastern and Southeastern Ontario, PPESO has focussed on developing the regional Niday Perinatal Database, program and professional development and regional support. The Child Health Network (CHN) in the Greater Toronto Area has developed system coordination protocols related to both perinatal care and children and has also focussed on developing education and evidence-based practice guidelines to promote greater sharing of information/resources and consistency of care delivery across the network. To date, CHN has focussed its attention on the coordination of postpartum and children's services. CHN member organizations include both hospitals and CCACs, while PPESO involves hospitals, public health units, community health centres, midwifery practices, and other health-related organizations.

- Liaising with nursing, medical and administrative personnel to foster interest in optimal perinatal care in the region and to maintain open communication between the program and among the hospitals.¹⁴

The Outreach Program works in partnership with the hospitals in Southwestern Ontario that provide perinatal services, as well as with provincial and national organizations. Presently, the Outreach Program is funded through the tertiary perinatal care program at SJHC, London, and the University of Western Ontario. Each year, the Outreach Program hosts an annual perinatal conference open to perinatal service providers throughout the region. The Outreach Program has focussed on delivering professional education and clinical skills development and the development of a comprehensive perinatal database.

Through a shared governance model and an outcome-based approach, the Outreach Program created an ad hoc group that was subsequently formalized into a regional steering committee called the Southwest Ontario Perinatal Partnership (or SWOPP). Membership in SWOPP includes both hospital and community-based perinatal services. Through SWOPP, a regional maternal transfer form, a regional summary of birth chart record, a neonatal resuscitation record, an ill-newborn record, a regional perinatal database and a client education brochure have been developed. SWOPP was developed with the vision that, in time, it would receive its own funding directly and would incorporate the functions of the Outreach Program.

In Southwestern Ontario, there is clear evidence through the work undertaken in this project, that there is a need to reinforce and enhance the quality of care focus that the Outreach Program has taken to date. At the same time, there are systems issues that have come to the fore that need to be addressed. These include:

- Defining the level of care provided at Level I and II hospitals, together with appropriate funding;
- Clarify the designation of HDGH, Windsor as a modified Level III perinatal services site;
- Strengthening referral and care protocols among sites; and
- Developing contingency plans in the event that hospitals cannot maintain their current level of perinatal service delivery, to accommodate perinatal requirements from within the region.
- Lack of regional ownership of the Perinatal Outreach Program through SWOPP.

The Coordinating Committee is proposing that SWOPP be asked to assume a leadership role to address these system-wide issues. In order to take on this added responsibility, it is important that SWOPP redefine its mandate and membership to enable it to address these systemic issues. SWOPP should also continue to collaborate

¹⁴ Excerpt from a presentation to the Quality of Care Committee, St. Joseph's Health Care, London, Ontario, October 16th, 2000.

with the other regions in Ontario and the Ontario Perinatal Partnership to build on existing strengths and successes.

4. Hospital-Based Perinatal Services in Southwestern Ontario are Vulnerable

From the data collected directly from hospitals throughout Southwestern Ontario, it is clear that hospitals are vulnerable in terms of their capacity to provide perinatal care based on several converging forces. These include: financial challenges, lack of and competition for physicians, lack of trained nurses, competition for nurses at regional, provincial and national levels, opportunity for retirements¹⁵, and the challenge in being able to offer full-time employment to nurses.

Resources to sustain and support perinatal care throughout Southwestern Ontario needs to be addressed in order to maintain the current capacity to provide perinatal services throughout the region. This lack of resources takes several forms:

- Lack of physicians (including anaesthetists, family doctors, obstetricians, and paediatricians) and midwives to provide perinatal care;
- Lack of nurses, expanded role nurses and nurse practitioners with expertise in perinatal care; and
- Lack of dedicated financial resources to support perinatal care, including training and education.

Resources to support perinatal care throughout Southwestern Ontario are lacking and need to be addressed in order to maintain the current capacity to provide perinatal services throughout the region.

Since hospital-based perinatal care is funded on a global basis, not program-specific, resources available to provide perinatal care are not 'protected' and are therefore subject to the overall financial and operational pressures of each hospital. This factor puts the human and financial resources needed to provide perinatal care 'at risk'.

The factors that are stressing the ability of hospitals to provide perinatal services are not unique to perinatal care. Perinatal care is unique, however, in that women and families, for the most part are coming to hospital for a normal, healthy experience rather than because of illness. Perinatal care is also unique in comparison to many other health care services in that it is not elective, outcomes are not predictable and wait lists cannot be used to address pressures in the system.

5. Hospitals 'at risk'

Since the Interim Report was published in March 2003, one hospital (Alexandra Hospital in Ingersoll) announced that it is no longer in a position to support maternal and newborn care. This closure is in addition to the closure of the obstetrical departments at Tillsonburg Memorial Hospital and the Kincardine site of South Bruce Grey Health

¹⁵ For more information, go to www.hoopp.ca

Centre over the last two years. The analysis of hospitals that was undertaken as part of this study included an assessment of hospitals 'at risk' in terms of their ability to continue to provide Level I (primary) perinatal services.

The risk factors that were used to assess hospitals involved the following:

- Volume of births;
- Availability of foetal electronic monitoring;
- Availability of epidurals;
- Ability to perform caesarean sections;
- Risk of a hospital not being able to sustain a primary (Level I) perinatal service;
- Distance to the nearest hospital providing perinatal services;
- Human resource requirements (now and pending); and
- Hospital restructuring.

Hospital sites that do not provide birthing services (i.e. respond to unplanned situations only) include:

Grey-Bruce ¹⁶	Huron Perth	Thames Valley	Essex/Kent/Lambton
Lions Head	Seaforth	Tillsonburg	Petrolia
Southampton	Exeter	Ingersoll	
Kincardine	St. Marys	Newbury	
Chesley			
Meaford			
Durham			

In addition, there are a number of hospitals that were identified as being 'at risk'. Hospitals identified at risk currently provide perinatal services but for a variety of reasons were identified as being in a position where they might not be able to continue. Alexandra Hospital in Ingersoll and the Kincardine site of the South Bruce Grey Health Centre were initially part of this list.

Grey-Bruce	Huron Perth	Essex/Kent/Lambton	Wellington County
Warton*	Clinton	Wallaceburg*	Palmerston*
Hanover	Goderich*		Mount Forest*
Walkerton	Listowel		
Markdale*	Wingham*		

* Denotes a hospital site that had fewer than 100 births in 2001.

The message coming out of this data is that small and rural hospitals are the most vulnerable. In Grey-Bruce, Owen Sound was the only hospital site that was assessed as not being 'at risk'. Similarly, in Huron-Perth, Stratford was the only site that was not assessed as being 'at risk'. Two of the three rural hospitals in

... small and rural hospitals are the most vulnerable.

¹⁶ For a review of the current state (2003) of perinatal services in Bruce County see, "Distribution and Delivery of Mother and Baby Care in Bruce County" by Nelvia Van Dorp, BSc., Faculty of Medicine and Dentistry, The University of Western Ontario and the Grey-Bruce Public Health Unit. (nvandorp@uwo.ca)

Oxford County no longer have a functional obstetrical unit.

The impact of an aging population tends to be most keenly felt in rural communities where young people tend to leave and population growth tends to favour older, retired persons. Since this trend is expected to continue, it is most likely that there will continue to be a reduction in the number of small rural hospitals that have a formal perinatal service. Some hospitals will no longer provide birthing services.

From a geographic perspective, the region is generally well served¹⁷. In the future, with the strategic location of the Level II sites, geographic access is not seen as being problematic with the exception of the southern portion of Grey and Bruce counties. Owen Sound, Stratford, Woodstock, St. Thomas, London, Windsor, Chatham and Sarnia all have the critical mass or volume of births at the present time to support a formal perinatal service. Geographically, these facilities are distributed throughout the region. The clear exception is the south Bruce Grey area where, should the current Level I sites no longer continue to provide perinatal services, the distance and travel time between communities in this area to either Owen Sound or Stratford would be significant. Having a strong and viable perinatal service centre in the southern part of

In the future, with the strategic location of the Level II sites, geographic access is not seen as being problematic with one exception, the southern portion of Grey and Bruce counties.

Bruce and Grey counties is important to ensure reasonable access to perinatal care for the residents of this part of the region in the future. Fortunately, the Grey Bruce Health Network has agreed to take the leadership required to ensure, as much as is possible, that the residents of the southern part of Grey and Bruce Counties maintain access to perinatal services.

There are additional risk factors that were identified through the course of this study. One has to do with the capacity of centres to provide the level of care that is needed to serve their referral population. More specifically, of the seven centres that have been identified through this study as providing Level II (secondary) perinatal care to their referral communities¹⁸, only two, Windsor Regional Hospital and the London Health Sciences Centre,¹⁹ are designated by the Ministry of Health and Long-Term Care as providing this level of care. The lack of official recognition for the other five sites needs to be addressed. There is a need for these centres to have the capacity to provide Level II perinatal care, but the resources to do so have not been present in all cases

¹⁷ See Appendix D for a map of Southwestern Ontario that shows the distribution of hospital-based perinatal services by volume of births, 2001.

¹⁸ The seven hospitals are the London Health Sciences Centre, Windsor Regional Hospital, Stratford General, St. Thomas-Elgin, Owen Sound site of Grey Bruce Health Services, Lambton Hospitals Group (Sarnia) and Chatham-Kent Health Alliance (Chatham).

¹⁹ As part of a restructuring process taking place in London, the Level III perinatal services currently being provided by St. Joseph's Health Care, London will be moving to the London Health Sciences Centre. When this happens the London Health Sciences Centre will become the Level III perinatal services site in the region.

and on-going financial pressures continue to put their ability to provide this level of perinatal care 'at risk'. For example, in mid 2003 when two anaesthetists left St. Thomas-Elgin General Hospital, it put the hospital's ability to provide 24/7 anesthesia coverage at risk. At the same time, they continued to experience increased demands on their perinatal services.

As an interdependent system, Level I sites rely on Level II sites being available; and Level II sites rely on Level III sites having the capacity to take on cases they cannot handle. Therefore a weakness in one part of the system has a direct impact on the perinatal service delivery system as a whole.

This interdependence is brought home in terms of the need to be able to transport ill babies after they have been born. Although transfer in-utero is preferred and acted on if risk factors are recognized and acted on in advance, this is not always possible or foreseen. When ill newborns need to be transferred to another site with more specialized staff, it needs to be expedited in as efficient and effective manner as possible. Unfortunately, this is not always the case.

In circumstances where ill newborns need to be transferred to another site with more specialized staff, this needs to be expedited in as efficient and effective manner as possible. Unfortunately, this is not always the case.

For example, ill newborns that require ventilation support are transferred directly to London or Windsor. However, Southwest Ontario is the only region in Ontario without a free-standing, separately funded neonatal transport team. Staff members are 'taken off the floor' to respond to these emergencies. This further reduces access to the tertiary care NICU at SJHC, London.

In situations where ill babies at Level I sites are non-ventilated, in many cases they could be safely treated in a Level II site. However, transport to a Level II facility does not always happen because there is not a predictable ability on the part of these hospitals to be able to travel to receive and transport these babies. At times, this results in infants being transferred to a tertiary level site when a secondary level site could meet the infants' needs. The emotional impact and financial cost of having to transfer mothers and/or ill newborns outside of their home community, and in some cases out of region and/or province, can be very significant. Having to cope with this extremely stressful situation without the support of family or familiar caregivers can be difficult. A regional perinatal services system therefore needs to ensure as much as possible that it has the resources to address hospital-based perinatal service needs as close to home as is clinically sound.

A related tertiary care issue involves the capacity of neonatal intensive care units (NICUs) to accommodate the needs of severely ill newborns. Based on data received from CritiCall, (1999-2003) in the Southwest as well as many other regional NICU centres in Ontario, access to NICUs is often restricted or units are closed. In Southwest Ontario, for example, the NICU at St. Joseph's Health Care, London, is closed more than the provincial average. This lack of capacity limits the ability of the SJHC, London

tertiary level NICU and obstetrical unit to fulfill its highly specialized mandate, and also limits the access of Level II babies from in London-Middlesex to this facility.

Another key issue that was identified through this study was lack of a capacity of some of the Level II hospitals to provide intrapartum pain relief (using epidurals) during labour²⁰. This was reported as being an important factor in women choosing not to give birth at these sites. The two hospital sites where pain relief (i.e., epidurals) was identified as a significant issue were Sarnia and Chatham. Maternal and newborn services staff at both sites indicated that if this service were available, more women in their communities would choose to give birth at their sites rather than go elsewhere. While these two hospitals are not the only ones where pain management may be problematic, the lack of this service was seen as having a direct impact on referral patterns²¹.

From a regional perspective the distribution of births and follow-up newborn care is skewed compared to what should be taking place.

The overall impact of these systemic and service delivery issues, from a regional perspective, is that the distribution of births and follow-up newborn care is skewed compared to what should be taking place.

An increase in the ability of community hospitals to accommodate more births and newborn care within their referral area, especially on the part of secondary (Level II) sites, is seen as having a direct and positive impact on communities as a whole and especially for women and their families who now go further away from their home community than they should expect to.

The cumulative impact of this risk analysis, from a regional point of view can be summarized as follows:

- Many hospitals no longer have a formal perinatal service;
- Many hospitals are 'at risk' in terms of being able to continue to have a formal service;
- Hospitals that need to be in a position to operate as fully functioning Level II sites do not have the necessary resources to do so;
- There is increasing pressure on the modified Level III (Windsor) and Level III (SJHC, London) sites to take responsibility for a higher proportion of secondary (Level II) births than is appropriate. This limits their capacity to provide tertiary level care; and

²⁰ The Coordinating Committee is recommending (as proposed in the Interim Report) that steps be taken to bring the secondary or Level II perinatal hospital sites together to address common issues, one of which is the issue of pain management. For a list of the Level II issues identified in the Interim Report see Appendix B.

²¹ In both Chatham and Sarnia, acute care hospital services are currently provided on two sites. Chatham will move to a single site hospital in December 2003 and Sarnia will move to a single site hospital in 2008. In both cases, having acute care medical staff on one site is seen as providing the opportunity to provide improved anaesthesia coverage necessary to support epidurals.

- The region is in a situation where access to neonatal intensive care is either restricted or closed for significant periods of time, leading to transfers of mothers and babies to tertiary perinatal care units elsewhere in Ontario and beyond.

This serves to demonstrate the overall vulnerability of the perinatal services system in Southwestern Ontario and the need to take a regional systems approach to address these systemic issues.

6. Training and Education—Issues and Opportunities

In addition to the systems issues that have been identified, training and education emerged as a significant perinatal care issue throughout the region.

Issues

Without the capacity to ensure high quality perinatal services within their defined scope of practice or service, hospitals that provide perinatal services are vulnerable. With the demographic reality taking hold within hospitals, there is a risk that nursing staff who are very experienced will be retiring at the same time as there will be inexperienced young people coming into the field.

Opportunities for in-services and training in perinatal care, both general and specialized, are critical and it is important to ensure on-going quality of perinatal care throughout the region. The need for these professional development opportunities applies primarily to the physicians and nurses who provide perinatal care.

Opportunities for in-services and training in perinatal care, both general and specialized, is critical and important to ensure on-going quality of perinatal care throughout the region

As with every field, there are changes to what constitutes 'best practice' and perinatal care is no exception. The capacity of hospitals to address complications associated with the birthing process is important to consumers. While resources are a key component of this issue, ensuring that staff has the skills and training to respond appropriately is important to the quality of care being provided.

Relatively small hospitals experience challenges in being able to dedicate nursing resources to perinatal care, given that the activity level on any given day may be very little or none at all. Facilities with variable activity levels need to develop strategies that will ensure staff is available when needed to provide perinatal services.

Perinatal staff has indicated that it is difficult to complete training because there is no one available to backfill or cover their position²². Feedback from perinatal stakeholders

²² Although there are not adequate resources, the region is not without resources to support training and education. Beginning in 2000/01 the Ministry of Health and Long-Term Care provided annualized funding to support perinatal training and education to the following hospital sites in the region: Chatham-Kent, Sarnia, Owen Sound, Stratford and Windsor Regional Hospital.

during the study has confirmed that this situation has grown more acute in recent years. In addition, the Coordinating Committee was informed that there is a serious shortage of preceptors to supervise and guide nurses during their in-service training in a work environment (i.e., providing hands-on experience, mentoring and exposure). This kind of experience-based training opportunity is key to ensuring that perinatal staff has the skills and experience to address the needs of mothers, babies, and families.

Opportunities

There are significant opportunities to share expertise across sites in the region. Given new enabling technologies, this can now be done through web-based forums, videoconferencing, in addition to face-to-face meetings. The level and quality of expertise in perinatal care in Southwestern Ontario is very high. The staff expertise does exist to provide the training and education needed.

The Regional Perinatal Outreach Program of Southwestern Ontario as noted earlier, provides education and training for perinatal stakeholders around the region. The program trains staff at community hospitals to recognize risk and to send the mother to a larger referral centre before the birth, whenever risk is present. The program also trains community hospital staff to deal with difficult situations when they cannot safely transfer the mother or baby. An evaluation of the program has confirmed that it assists in ensuring rural physicians stay current and allows smaller hospitals to continue offering obstetrical care. The program has been recommended as a model for other disciplines. The Outreach team includes two full-time nurse consultants, two medical co-directors and a part-time administrative support person.

In addition to these resources within the region, through the Registered Nurses Association of Ontario, 12 week advanced clinical/practice fellowships are available. Grey Bruce Health Services, for example, has taken advantage of this opportunity by offering three of their nurses the opportunity to work for 12 weeks in a Level II centre with a high rate of births (2-3,000 per year). This has increased the level of expertise of their staff and increased their clinical practice skills. They have reported that this opportunity has helped to support the long-term viability of their perinatal service and enriched the nursing experience for those involved.²³

Another recent opportunity for on-going professional development has been developed through the electronic Child Health Network (eCHN).

The electronic Child Health Network (eCHN) is a non-profit organization dedicated to using computers to share child health and safety information among parents, children, and health care providers. It is designed to provide the communications infrastructure to support Child Health Networks across the province. Network members have come together to

²³ For more information about this program go to www.rnao.org/acpf. A profile of the GBHS experience is included in the RNAO's Advanced Clinical/Practice Fellowship newsletter (August 2003).

provide a common standard of care for children, no matter where those services are delivered²⁴.

The Regional Perinatal Services Project Coordinating Committee takes the position that it is vitally important that the training and education needs of the medical and allied health staff charged with the responsibility of providing perinatal care be addressed and adequately resourced. By using this approach, the quality of care that mothers, newborns and families need, will be realized and supported through a fully integrated and coordinated regional system of perinatal care.

7. Summary Remarks

The Coordinating Committee has undertaken this in-depth investigation and developed recommendations for action to ensure equitable access to appropriate perinatal services throughout Southwestern Ontario.

There is a strong spirit and history of collaboration and partnership in the region of Southwestern Ontario. The ability to work together in the best interests of women, babies and families has been a hallmark of collaborative activities to date and remains a necessary ingredient to moving forward. Sustaining and building on the strengths of the system as it currently exists is a necessary prerequisite for success. At the same time, this report has highlighted a number of important and significant issues in the hospital-based perinatal services system in Southwestern Ontario. It can no longer be taken for granted that perinatal services have the resources needed to be sustainable. As the recommendations section that follows will show, there are a number of actions that have been proposed. If these recommendations are acted on collaboratively, with a clear vision and defined sense of purpose, the organization and delivery of perinatal services in Southwestern Ontario will be sustained and improved.

²⁴ For more details about eCHN see Appendix C or go to <http://www.echn.ca/> 2003

Recommendations For Action

A. Organizational Leadership

1. Regional Coordination Structure

That the mandate and terms of reference for the Southwestern Ontario Perinatal Partnership (SWOPP) be reviewed in light of this report to ensure it has the capacity and leadership to address both clinical and organizational system issues required to support a regional perinatal organizational structure.

Rationale:

- a) There is a need to provide an organizational structure that can ensure the recommendations of this report are implemented and priority items are addressed as effectively as possible.
- b) SWOPP exists and provides a good vehicle to carry forward the work of the Regional Perinatal Services Project.
- c) There is a need to expand the current scope of SWOPP to address administrative and system management issues. Consideration should be given to integrating SWOPP and the Regional Perinatal Outreach Program of Southwestern Ontario, such that the Outreach Program would be co-owned by the hospitals in the Southwest region and the tertiary care unit.
- d) A review will ensure there is no duplication of mandates with other organizational structures including the “*Western Ontario Regional Paediatric Network*”.

Resources:

- a) Additional dedicated staff resources to fully support SWOPP.
 - i) Coordinator
 - ii) Full-Time Administrative Support
- b) DHC staff person.
- c) In-kind resources from participating hospitals and hospital networks.

Target of Recommendation:

- a) Southwestern Ontario Perinatal Partnership (SWOPP) Executive.
- b) Partner hospitals and hospital networks

2. Leadership Involvement

That the senior administrative leaders at hospitals and hospital networks providing perinatal services become active members of SWOPP to provide input and influence in organizational and system issues affecting perinatal services across the region.

Rationale:

- a) Need for decision-makers to be at table.
- b) Issues extend beyond clinical mandates and domain.
- c) Need to bring issues forward to senior management, boards and Ministry of Health and Long-Term Care.

Resources:

- a) In-kind resources from participating hospitals and hospital networks.

Target of Recommendation:

- a) Hospital CEOs—Correspondence & Communication with Hospital CEOs from Southwestern Ontario Perinatal Partnership (SWOPP) Executive.

3. Provincial Coordination Structure

That the mandate and terms of reference for the Ontario Perinatal Partnership be reviewed in light of this report to ensure it has the capacity and leadership to address both clinical and organizational system issues required to support and maintain a fully functioning provincial perinatal organizational structure.

Rationale:

- a) There is a need to provide an organizational structure that can ensure the recommendations of this report, that are provincial in nature, are implemented and priority items are addressed as effectively as possible.
- b) The Ontario Perinatal Partnership (OPP) exists and provides a good vehicle to carry forward the work of the Regional Perinatal Services Project.
- c) There is a need to formalize the structure of the Ontario Perinatal Partnership with an approved mandate and terms of reference.

Resources:

- a) Additional dedicated staff resources to support OPP.
- b) District Health Council staff person.

Target of Recommendation:

- a) Ontario Perinatal Partnership.

B. Levels of Care**1. Level of Care in a Community**

That the Ministry of Health and Long-Term Care, in collaboration with the Southwestern Ontario Perinatal Partnership (see Section A) use the National Guidelines, together with the findings of the Regional Perinatal Services Project, to review the level of perinatal resources provided and required at hospital sites around the region.

Rationale:

- a) Hospitals have indicated that they are operating at a level of care that exceeds the level they have been designated by the Ministry of Health and Long-Term Care.

Resources:

- a) Required resources would be identified based on the required level of service.

Target of Recommendation:

- a) Southwestern Ontario Perinatal Partnership (SWOPP) Executive.
- b) Ministry of Health and Long-Term Care—Assistant Deputy Minister, Acute Services Division.
- c) District Health Councils.
- d) Hospitals and hospital networks providing perinatal care in the region (with particular attention on hospitals functioning as Level II sites).

2. Official Recognition of Perinatal Program Levels

That the Ministry of Health and Long-Term Care officially recognize the level required at each hospital site based on the scope of perinatal care provided at the facility, using the standards of the National Guidelines.

Rationale:

- a) The National Guidelines define public and provider expectations for defined levels of services (i.e. Level I, II or III). If a hospital is providing perinatal service at a level defined within the National Guidelines, the Ministry of Health and Long-Term Care should appropriately recognize it at that level.

Resources:

- a) Assuming that the expanded resources required are in place (see *Recommendation B. 1.*), funding for individual perinatal programs will continue to come from an expanded global budget of the hospital in which the program is contained.

Target of Recommendation:

- a) Ministry of Health and Long-Term Care—Assistant Deputy Minister, Acute Services Division.

3. Perinatal Services in South Bruce Grey

That the appropriate resources be provided to ensure that the southern portion of Bruce and Grey Counties continues to have access to fully functioning Level I perinatal services.

Rationale:

- a) The majority of the southwest region is in relatively close proximity to a Level II site with the exception of the southern portion of Bruce and Grey Counties.
- b) The closest Level II sites to the southern portion of Bruce and Grey Counties are located in Owen Sound and Stratford.
- c) There are a number of hospitals in the Bruce Grey area that are at risk of losing their formal perinatal services.

Resources:

- a) Resources would be identified based on the extent of changes required to ensure on-going provision and access to Level I hospital services.

Target of Recommendation:

- a) Ministry of Health and Long-Term Care—Assistant Deputy Minister, Acute Services Division.
- b) Chair, Grey Bruce Health Network.

4. Neonatal Transport

That the appropriate resources be provided to the Southwest region to enable ill newborns to be transported to appropriate care settings in a timely and safe manner. This includes transfer to both Level II and Level III sites.

Rationale:

- a) The southwest region is the only region in Ontario without a free-standing, separately funded neonatal transport team.
- b) Many babies that could be safely treated at a Level II site are not transported to the Level II site because these sites do not have a predictable level of staffing to receive and transport these babies. As a result, a baby requiring only Level II care is transported to a Level III centre.

Resources:

- a) Dedicated financial resources to support the provision of a dedicated neonatal transportation team.
- b) Sufficient financial resources that will enable Level II sites to transport ill babies to their facility

Target of Recommendation:

- a) Ministry of Health and Long-Term Care—Emergency Health Services, Acute Services, and Community Health Divisions.

C. Contingency Planning

1. Capacity of sites to provide perinatal services

That existing hospitals and hospital networks develop contingency plans and an impact analysis to:

- *Address the closure of sites with low volumes and “at risk” of no longer being able to provide perinatal services; and*
- *Address sites which, due to resource limitations, will not be able to provide services at their current capacity.*

2. Leadership Role for Level II sites

That the Level II perinatal service sites provide a leadership role in the development of contingency plans in their catchment area.

3. Regional Monitoring

That the overall impact of changes across the region and impact of any future closures be assessed at a regional level by the Southwestern Ontario Perinatal Partnership (see Section A for details).

4. Provincial Monitoring

That the overall impact of changes across the region and impact of any future closures be assessed at a provincial level by the Ontario Perinatal Partnership.

Rationale for Contingency Planning:

- a) Need to be able to plan for increased demand at surrounding sites and tertiary centres when a perinatal site closes.
- b) Several “at-risk” sites have closed over the last few years.
- c) The Level II sites each have a significant and stable perinatal service at the present time, and are currently referral centres for Level I sites and sites with no formal designation.
- d) Need to ensure equitable access to perinatal services throughout the region and province.

Resources:

- a) Administrative staff resources required to support the contingency planning process.
- b) Possible transfer of funds between facilities to support changes in delivery of services.
- c) District Health Council staff to provide health planning expertise.

Target of Recommendations:

- a) All hospitals and hospital networks providing perinatal care in the region.
- b) District Health Councils.
- c) Ministry of Health and Long-Term Care—Assistant Deputy Minister, Acute Services Division.

D. Training and Education

1. Regional Perinatal Outreach Program of Southwestern Ontario

That the Regional Perinatal Outreach Program of Southwestern Ontario (Outreach Program) continue to provide leadership in education and training for perinatal service providers throughout Southwestern Ontario.

Rationale:

- a) The Outreach Program has successfully provided training and education for perinatal stakeholders for the last 24 years.
- b) Need for all perinatal programs to provide optimal care for their community through coordinated educational programs.

Resources Required:

- a) Continued and expanded funding of Outreach Program and Level II training (see Section A).
- b) Resources to support professional education and training for perinatal service providers.

Target of Recommendation:

- a) Regional Perinatal Outreach Program of Southwestern Ontario.
- b) Southwestern Ontario Perinatal Partnership (SWOPP)

2. Specialized Level II Nursery Training

Hospitals that currently receive funding from the Ministry of Health and Long-Term Care for perinatal education should ensure that those funds are being used for that purpose. That additional resources as required/identified be provided for specialized Level II nursery training throughout the region (6 sites in Owen Sound, Sarnia, Chatham, St. Thomas, London Health Sciences Centre and Stratford).

Rationale:

- a) Additional resources are required to support specialized Level II perinatal services for physicians, nurses, and expanded role nurses.
- b) Although individuals with required expertise to teach this program are available within the region, resources are required to allow those individuals to take time to prepare a course and provide it to stakeholders.
- c) Need to ensure critical role of Level II perinatal services across the region are supported and enhanced.

Resources Required:

- a) Additional staff resources to provide training and backfilling (\$ per site to be determined).

Target of Recommendation:

- a) Hospitals and hospital networks providing perinatal services in the region.
- b) Ministry of Health and Long-Term Care—Nursing Secretariat.

- c) College of Nurses of Ontario.
- d) Regional Perinatal Outreach Program of Southwestern Ontario.
- e) Southwestern Ontario Perinatal Partnership (SWOPP)

3. Provincial System for Perinatal Training and Education

That SWOPP investigate, along with the Ontario Perinatal Partnership, the establishment of a provincial system for perinatal training.

Rationale:

- a) Need to investigate alternate delivery methods to address time and resource constraints. Examples include modular self-training and on-line Internet training.
- b) Need to develop methods to provide “backfilling” for staff who are involved in training in order that they are not pulled back to their regular jobs.
- c) Need to ensure ongoing capacity to provide high quality perinatal services across the region.
- d) Need to provide opportunities for preceptorship at training sites.
- e) Need to provide opportunities for staff to train at other sites.
- f) Need for orientation for new staff working at perinatal sites.
- g) Representatives from local community colleges, universities, perinatal programs, and medical schools can assist in providing advice on addressing barriers to training and education in perinatal services that have been identified in this study.
- h) Need to build upon existing training, including training contained in “Healthy Children Development” documents.

Resources Required:

- a) Resources required to organize and support the work of the expert panel.
- b) Resources required to address directions and recommendations developed by the expert panel.
- c) Resources required to fund preceptorship roles and staff training at other perinatal sites—(\$ per site to be determined).

Target of Recommendation:

- a) Southwestern Ontario Perinatal Partnership.
- b) Ontario Perinatal Partnership.

4. Hospitals with Low Volumes

That steps continue to be taken to ensure that hospitals with low volumes receive the training, support, and direction they need to provide quality perinatal services.

Rationale:

- a) In order to ensure the provision of quality care within the scope of services available at these sites, there is a need for on going support, education, and training.
- b) Clinical protocols need to be developed to ensure consistent practices at low volume sites.

Resources Required:

- a) Resources at Level II sites and the Regional Perinatal Outreach Program of Southwestern Ontario to support the provision of quality perinatal care at hospital sites with low volumes.

Target of Recommendations:

- a) Hospitals and hospital networks providing perinatal services in the region.
- b) Regional Perinatal Outreach Program of Southwestern Ontario.
- c) Southwestern Ontario Perinatal Partnership (SWOPP)

5. Public Education to Identify Appropriate Centres of Care

That steps continue to be taken to ensure the public is informed that some hospitals no longer provide perinatal care and mothers should present at those sites that do provide the level of care that they require.

Rationale:

- a) Many hospitals no longer provide perinatal care.
- b) In discussion with their physician, mothers should present at hospitals that can provide perinatal care.

Resources Required:

- a) Education programs through hospital perinatal programs, public health units and local physician offices.

Target of Recommendation:

- a) Physicians, Midwives and Public Health Unit Staff.

E. Pain Management**1. Capacity to Provide Intrapartum Pain Relief Services (epidurals, intravenous narcotics, etc.) at Level II Sites around the Region**

That the Level II hospitals work with their physicians to develop a strategy to enable pain relief services to be available for mothers presenting at their facility.

Rationale:

- a) Mothers may make hospital choices based on availability of pain relief services. If epidurals are not available, some mothers may travel to another site where the service can be provided. This puts added stress on the resources of the Level III sites. It also puts these women in the inappropriate situation of having to choose between adequate pain relief and having their baby at the nearest Level II hospital.
- b) Need to determine if there are financial or other barriers for anaesthetists to provide epidurals. Are there other barriers?
- c) Although epidural service is available at some sites, full 24/7 epidural coverage is not available at all sites.

Resources Required:

- a) In-kind resources from hospitals, hospital networks, and physicians required to develop strategy.
- b) Need for additional financial resources will need to be evaluated based on results of strategy developed.

Target of Recommendation:

- a) Level II Hospitals.

2. Alternate Providers to Deliver Pain Relief

That the SWOPP work with the Ontario Perinatal Partnership to investigate alternate methods of delivering pain relief, including the use of nurse anaesthetists, family physician anaesthetists, etc.

Rationale:

- a) Alternative services are required to address shortage of trained anaesthetists.
- b) Some mothers make hospital choices based on availability of pain relief services. If epidurals are not available, some mothers may travel to another site where the service can be provided. This issue contributes to an inappropriate distribution of births across the region, and puts added stress on the resources of the Level III sites. It also puts these women in the inappropriate situation of having to choose between adequate pain relief and having their baby at the nearest Level II hospital.

Resources Required:

- a) Assistance from the Royal College of Physicians and Surgeons, and the College of Nurses of Ontario

Target of Recommendation:

- a) Royal College of Physicians and Surgeons
- b) College of Nurses of Ontario

F. Measurement and Evaluation**1. Measurement and Evaluation in Southwestern Ontario**

That the Southwestern Ontario Perinatal Partnership maintain and support an effective system/tool to measure and evaluate the performance of perinatal care in the region. This system/tool will be integrated into a provincial system/tool.

Rationale:

- a) Need to maintain a perinatal database that can be integrated provincially.
- b) Need to establish specific benchmarks and performance measures to determine if care provided at each site meets expectations of the National Guidelines, the Ministry of Health and Long-Term Care, and each individual hospital.

- c) Measures and evaluation will be used to account for level of care provided at each hospital. For example, the capacity to receive and transport ill infants impacts the ability of certain Level II centres to accept ill newborns appropriate to a secondary care hospital. The issue of neonatal transport should be evaluated to determine existing capacity and future needs.
- d) Need to determine process to assess consumer choice and decision-making.
- e) Information will assist hospitals in addressing any public misconceptions that may exist about scope or quality of services available.

Resources:

- a) In-kind resources from all hospitals and hospital networks providing perinatal services.
- b) Database Coordinator
- c) Database Analyst
- d) Administrative Support

Target of Recommendation:

- a) Hospitals and hospital networks providing perinatal care in the southwest region.
- b) Southwestern Ontario Perinatal Partnership.
- c) Ministry of Health and Long-Term Care.
- d) CritiCall

2. Measurement and Evaluation throughout Ontario

That the Ontario Perinatal Partnership, in conjunction with the Ministry of Health and Long-Term Care, develop, support and maintain an effective system/tool to measure and evaluate the provincial perinatal system.

Rationale:

- a) Need to establish a provincial perinatal database.
- b) Need to establish specific benchmarks and performance measures to determine if care provided at each site meets expectations of the National Guidelines, the Ministry of Health and Long-Term Care, and each individual hospital.
- c) Measures and evaluation will be used to account for level of care provided at each hospital. For example, the capacity to receive and transport ill infants impacts the ability of certain Level II centres to accept ill newborns appropriate to a secondary care hospital. The issue of neonatal transport should be evaluated to determine existing capacity and future needs.

Resources:

- a) In-kind resources from all hospitals and hospital networks providing perinatal services around the province.
- b) Database Coordinators (2)
- b) Database Analysts (2)
- c) Administrative Support

Target of Recommendation:

- a) Ontario Perinatal Partnership Executive.
- b) Ministry of Health and Long-Term Care.
- c) Canadian Institute for Health Information (CIHI).
- d) CritiCall

Appendix A
Regional Perinatal Services Project
Coordinating Committee Members
October 2003

Dr. Renato Natale (Co-Chair)	Associate Chief, Obstetrics, St. Joseph's Health Care London/London Health Sciences Centre and Obstetrical Co-Director, Regional Perinatal Outreach Program of Southwestern Ontario
Dr. Ewan Porter (Co-Chair)	Chief of Paediatrics, Grey Bruce Health Services, Owen Sound
*Michael Barrett	Manager, Planning and Support, Southwest Region, Ministry of Health and Long-Term Care
*Shirley Borges	Senior Health Planner, Grey Bruce Huron Perth District Health Council
Dr. Jill Boulton	Senior Medical Director, Women's and Children's Clinical Business Unit, London Health Sciences Centre and Neonatal Co-Director, Regional Perinatal Outreach Program of Southwestern Ontario
*Glenda Clarke	Senior Health Planner, Grey Bruce Huron Perth District Health Council
*Nancy Dodman	Perinatal Nursing Consultant, Regional Perinatal Outreach Program of Southwestern Ontario
*Steve Elson	Manager, Integrated Strategic Alliances & Networks, St. Joseph's Health Care, London/London Health Sciences Centre
*Linda Fitzpatrick	Senior Health Planner, Thames Valley District Health Council
Brenda Foster	Program Director, Women and Children's Health, Chatham-Kent Health Alliance
Sheila Hamilton	VP Clinical Services, Grey Bruce Health Services
Sandra Letton	VP Acute/Ambulatory Care and Chief Nursing Officer, St. Joseph's Health Care, London
Dr. Bill Mundle	Medical Director, Maternal Fetal Medicine, Windsor Regional Hospital
*Laura Parizeau	Administrative Resident, Integrated Strategic Alliances & Networks, St. Joseph's Health Care, London/London Health Sciences Centre
*Gwen Peterek	Perinatal Nursing Consultant, Regional Perinatal Outreach Program of Southwestern Ontario
Dr. Michael Roe	Chief of Obstetrics, St. Thomas-Elgin General Hospital

Ellen Rosen	VP, Women and Children, Clinical Business Unit, London Health Sciences Centre
*Ron Shaw	Director of Planning, Essex, Kent and Lambton District Health Council
Wendy Walker	Program Director, Maternal Infant Child, Lambton Hospitals Group
Kathi Wilson	Chief of Midwifery for London Health Sciences Centre and St. Joseph's Health Care, London (as of January 2003)

* Regional Perinatal Services Project Working Group Members

Former Members

Dr. Alan Bocking	Chair/Chief, Obstetrics and Gynaecology, University of Western Ontario, St. Joseph's Health Care, London/London Health Sciences Centre
Dr. Stan Brown	Former VP Medical, Huron Perth Hospitals Partnership
Pat Campbell	President and CEO, Grey Bruce Health Services
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Appendix B
**Excerpt From The March 20, 2003 Interim Report of the Regional
Perinatal Services Coordinating Committee Regarding Level II
(Secondary) Perinatal Services**

There are a number of hospitals in Southwest Ontario that, using the National Guidelines for the provision of Family-Centred Maternity and Newborn Care, together with the provider survey information, are seen as providing a lot of the functions associated with secondary (or Level II) perinatal care. However, at the present time there are only two 'official' Level II perinatal sites in the region, Windsor Regional Hospital and London Health Sciences Centre. As noted earlier, the other hospital sites that are seen as providing the equivalent of secondary or Level II services are:

Thames Valley	St. Thomas-Elgin General Hospital
Huron Perth	Stratford General Hospital
Grey Bruce	Grey Bruce Health Services (Owen Sound site)
Essex-Kent-Lambton	Lambton Hospitals Group (Sarnia) Chatham-Kent Health Alliance (Chatham)

It is suggested that these five secondary (or Level II) perinatal hospital sites, with the support of the tertiary or Level III sites, have the potential to play an enhanced and key role in the further development of perinatal services in Southwestern Ontario.

The reasons for making this suggestion are as follows:

- Each of these facilities is strategically located from a geographic (and therefore accessibility) perspective. They draw people from a geographic area that may include a number of primary (Level I) perinatal sites as well as hospital sites that do not have a formal perinatal service.
- Each of these facilities has a significant and stable perinatal service at the present time and is in the top half of the number of site-specific births in the region. There is little if any risk that these sites will not be in a position to continue to provide perinatal services, although as with all sites, human resource pressures may currently present a limiting factor. Some of these sites are experiencing growth in the perinatal services they are providing.
- Either internally (with multi-site organizations) or externally, they are referral centres for primary (Level I) sites and sites with no formal official perinatal service.

- ❑ Their relationship with the tertiary (Level III) facilities in the region is key to their on-going viability and sustainability. Any weakness in their ability to provide care will result in added demands on the Level III facilities (as has already been experienced). It is in the best interests of the tertiary (Level III) facilities to do what they can to support a viable and high quality of care at each of the secondary (Level II) sites.
- ❑ Quality of care and the scope of services available have a direct impact on the volume of perinatal services provided. The ability of secondary (Level II) facilities to provide a consistently high quality and consistent scope of service will help to ensure that they can serve their local and referral population and thereby continue to provide perinatal care as close to home as is possible.

In light of these comments, it was agreed that the five secondary (Level II) sites in the region should be asked to come together to develop and implement collaborative action plans to support and enhance the on-going provision of secondary (Level II) perinatal services in the region including:

- ❑ Developing a business case and strategy to achieve official recognition by the MOHLTC as being secondary (Level II) perinatal service providers.
- ❑ Developing consistent protocols for the provision of back-up and support to hospitals with no formal perinatal services and primary (Level I) referral hospitals within their catchment areas including education, clinical protocols, and triage and transfer procedures.
- ❑ Sponsoring region-wide perinatal staff in-service and education sessions, in collaboration with the Regional Perinatal Outreach Program of Southwestern Ontario that will support consistent application of 'best evidence-based perinatal practices' across the secondary (Level II) sites. Examples include fetal health surveillance, neonatal resuscitation, and high-risk neonatal care.
- ❑ Collaboratively addressing shortfalls in the scope of service or care available at the secondary (Level II) facilities.
- ❑ In collaboration with primary (Level I) service sites, developing contingency plans for the management of perinatal care in the event that Level I facilities are not in a position to provide perinatal services on either a temporary or long-term basis. It is suggested that this approach be initiated in areas within the region that are seen as currently being at risk in terms of their ability to provide Level I perinatal care.
- ❑ Consulting and getting input from consumers about why they go to particular hospitals for perinatal services and using this information to develop strategies to provide perinatal services 'as close to home' as is possible and clinically sound.

The members of the Regional Perinatal Services Project Working Group will assist in the facilitation and coordination of the collaborative processes outlined above.

It is suggested that the participants in the discussion include clinical and administrative leaders from the secondary (Level II) sites as well as tertiary (Level III and Modified Level III) and Regional Perinatal Outreach Program of Southwestern Ontario representatives.

Appendix C

Profile Of eCHN-Based Professional Development Opportunities

From <http://www.echn.ca/>

One of the key benefits of the electronic Child Health Network (eCHN) is to allow health care professionals better access to the education and training provided by all eCHN and Child Health Network (CHN) members.

The increased patient information available through a larger network of health care providers enhances the potential for research studies of children's illnesses and treatment.

[PROFOR](#) is a web-based site currently available only to health care professionals across Ontario. The site includes a wide range of information resources that allow providers to keep up to date, share information and exchange on-line insights.

To access the site, you must have a password that can only be obtained from the [PROFOR User Coordinator](#) at your facility.

The components

Through PROFOR, health care professionals have access to the following types of information:

- Professional presentations and discussions including rounds for medical, nursing and other professional services at eCHN and CHN member facilities
- Immediate access to Practice Guidelines, Protocols and Pathways for a number of specialty areas including anaesthesia, bioethics, critical care, dentistry, diagnostic imaging, health records, infectious diseases, laboratory services, medical-paediatrics, medical-surgical, neonatology, nursing, ophthalmology, pharmacy, professional services, psychiatry, psychology and social work.
- Educational material that can be printed off PROFOR and given to parents and children for their reference after their office or hospital visit
- Newsletters published by eCHN member facilities
- Pharmacy information, including the 2002 -2003 Hospital for Sick Children Formulary of Drugs
- An Upcoming Events Calendar with paediatric specific events being held at network member sites.
- Links to eCHN member paediatric specific sites and general health information web sites pertinent to paediatric health care professionals.

PROFOR advisory council

The PROFOR Advisory Council consists of eCHN and CHN member health care professionals from a number of disciplines.

The Council members review content prior to posting to confirm its appropriateness for PROFOR. The Council will champion the use of PROFOR and represent its constituents to ensure comprehensive coverage of the educational requirements of their disciplines.

Benefits of PROFOR

PROFOR will allow health care professionals to keep up to date on the latest information, announce and solicit patients for research and facilitate the sharing of best practices.

A community-based paediatrician, for example, will be able to watch the Grand Round at The Hospital for Sick Children on demand via video streaming on the web.

Summary information on research completed or underway will ensure that health care professionals are aware of clinical trials being carried out by the members of CHN and eCHN.

Sharing educational resources suitable for parents and children will make more efficient use of scarce health care funding. Being able to print materials on demand will ensure that up to date information is available to parents and children at low cost.

For more information

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Appendix D

Map of Southwestern Ontario Showing Perinatal Service Sites by Volume of Births, 2003



Source: Regional Perinatal Outreach Program, 2003