

Challenges for Providing Maternity Services: The Impact of Changing Birthing Practices

Popularized through Hans Christian Andersen's 19th century fairy tales, the image of storks delivering babies endures today in stories and cartoons. In reality, though, babies need human help to arrive into this world. That help may come from any of several types of care providers trained to assist with the common miracles of pregnancy and birth.

Pregnancy and childbirth are the leading causes of hospitalization among Canadian women, accounting for 24% of the total in 2001–2002. The Canadian Institute for Health Information (CIHI) recently released a report, "Giving Birth in Canada: Providers of Maternity and Infant Care," which summarizes trends in maternity care. Key highlights included the changes in the availability, distribution and participation of professionals that traditionally provide maternity services and the changing nature of births. These trends may have profound implications for care now and in the future. For example, these trends may help inform decisions facing communities, health-care providers and governments across the country, including:

- How to ensure availability of appropriate maternity/newborn care in the future, potentially involving a changing mix of service providers and delivery models
- How to recruit and retain care providers, particularly in rural and remote areas
- How best to inform families about options for maternity care and support them in their choices

Over the past two decades, there have been significant changes in birthing:

- The birth rate has steadily declined from 14.5 per 1,000 population in 1990–1991 to 10.5 per 1,000 population in 2001–2002 (Statistics Canada 2003).
- The percentage of higher-risk births is increasing.
- The average age of women giving birth has increased: 7.6% of all live births were among women aged 35–39 and 1% among women 40 and over in 1991, compared to 12.4% among women aged 35–39 and 2.1% among women 40 and over by 2000 (Health Canada 2003).
- An ebb and flow in the rate of caesarean section births has occurred. It was approximately 15% in 1979–1980 (Millar et al. 1996), but reached an all-time high of 21.4% in 2000–2001.

Changes in Practice Patterns by Family Physicians and Obstetricians

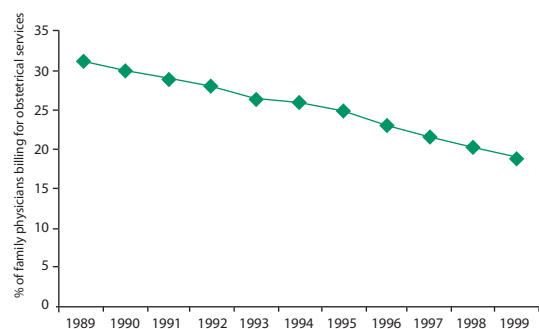
Family physicians can be involved in all stages of maternity care – from preconception to prenatal to postpartum and beyond. Most family physicians provide some type of care along this continuum, but fewer are attending deliveries. In 2001, less than one in five (19%) family physicians reported providing intrapartum care (Reid et al. 2002). Of those who reported attending births, 85% reported that they were skilled at vacuum extractions, 44% did low-forceps deliveries and 4%

did mid-forceps and rotation deliveries. Ontario research suggests a range of self-reported factors associated with a decision not to deliver babies, including concerns about personal lives, confidence with obstetrical skills, unattractive fee structures and the perceived threat of malpractice suits (Godwin et al. 2002).

The likelihood that a family physician provides delivery services varies across Canada. Reid and colleagues reported that the proportion of family physicians attending deliveries in 2001 ranged from 8 to 69% depending on the province or territory (Godwin et al. 2002). Family physicians in the western provinces and the territories are more likely to deliver babies than those in central or Atlantic Canada, and small-town/rural-area doctors are more likely to attend deliveries than their urban counterparts.

Likewise fee-for-service billing data suggests that family doctors are attending a decreasing proportion of births. In 2000, they attended 39% of vaginal births, down from 44% in 1996. That said, those who "remain in the game" are actually delivering more babies on average than in the past. According to the Canadian Medical Association Physician Resource Questionnaire, family physicians attended, on average, about 30 deliveries per year in 1986. By 2000, the average had risen to 41 per year (Martin 2003).

Figure 1: Family Physicians Less Likely to Provide Obstetrical Care



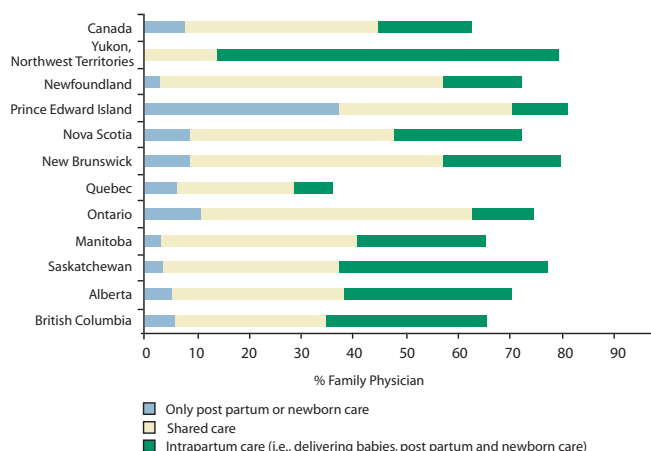
Source: National Physician Database, CIHI.

If family physicians are delivering fewer babies, who is filling the gap? The answer, in large part, is obstetricians.

The total number of births attended by obstetricians has been relatively stable since the mid-1990s, but with birth rates falling, this means that they are attending a larger share of deliveries, including:

- 61% of vaginal births in Canada's provinces in 2000, up from 56% in 1996
- 95% of all caesarean sections in 2000, up from 93% in 1996
- 96% of all multiple births in Canada in 2000, up from almost 92% in 1994

Figure 2: Maternity and Newborn Care Provided by Family Physicians



Source: 2001 National Family Physician Workforce Survey, part of the JANUS Project, College of Family Physicians of Canada.

Whether these trends will continue may depend, in part, on the future supply of obstetricians/gynecologists. In a 1999 survey by the Society of Obstetricians and Gynaecologists of Canada, 34% (or about 561) of obstetricians/gynecologists said that they were planning to retire in 2000–2005 (Blain et al. 2000). While some may defer their decision, if current trends continue, there will be only about 250 new physicians entering residency programs in obstetrics/gynecology over the same period (Canadian Resident Matching Service 2003).

The provision of birthing services appears to be changing in rural and Northern community hospitals. For example, a survey of northern Ontario community hospitals showed that fewer offered birthing services in 1999 than in 1981 (Hutten-Czapski 1999). Fifteen of 39 communities had no obstetrical services in 1999, compared to only three in 1981. The remaining hospitals offered a variety of services ranging from no local caesarean capability to obstetrician-provided caesareans.

The Return of Midwifery?

Physicians provide care for most mothers and attend most deliveries in Canada today. In 1994, Statistics Canada asked Canadian women about their willingness to receive care from health professionals other than doctors during their pregnancy, their delivery and postpartum care (Wen et al. 1999).

- 31% of women said they would be willing to go to a birthing centre rather than a hospital to have a baby.
- 21% were receptive to the idea of having a nurse or midwife deliver their baby instead of a doctor.
- 85% would accept postpartum care from a nurse or midwife instead of a doctor.

Until the early 1990s, Canada was one of only a handful of countries that had no midwifery legislation (Hawkins and Knox

2003). Over the past decade, regulation of midwifery has increased, but this does not necessarily mean services are covered by government health insurance plans. While Ontario, Quebec, Manitoba, British Columbia and the Northwest Territories fund midwifery services through provincial and territorial health insurance plans, users in some provinces, such as Alberta, pay about \$2,500 per course of care (Hawkins and Knox 2003).

In Canada, the number of registered midwives practising in Canada grew from 96 to 413 between 1993 and 2002. Some of this increase reflects regulatory changes, such as growth in registrations, rather than actual growth in the number of midwives. Nevertheless, with the increase in the number of midwives, and in the number of provinces who train and regulate them, there is the potential for more expecting mothers to choose these healthcare professionals to deliver their babies.

Canada's use of midwifery services is significantly different than that of many developed countries.

Nationally, about 3% of women said that they had received prenatal care from a midwife in 2000–2001 (Statistics Canada 2000). Among four provinces (Ontario, Manitoba, Alberta, British Columbia), rates of in-hospital deliveries by midwives ranged from 0.5 to 5.1% in 2001–2002. In England and New Zealand, on the other hand, midwives attend seven in ten births (British Columbia Centre of Excellence for Women's Health 2003). The rate in Holland is even higher (90%), with one-third of all babies born in the home (Hawkins and Knox 2003). The situation in the United States, however, is closer to our own: midwives attended 8% of births in 1999 (Centers for Disease Control and Prevention 2003).

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-  The young physician starts life with twenty drugs for each disease, and the old physician ends life with one drug for twenty diseases.
-  The successful physician starves the first ten years, lives on bread and butter the second, and may have cakes and ale the third decade.
-  There are incurable diseases in medicine, incorrigible vices in the ministry, insoluble cases in law.
-  Humanity has but three great enemies: fever, famine, and war; of these by far the greatest, by far the most terrible, is fever.

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(Source: Sir William Osler: *Aphorisms from His Bedside Teachings and Writings*. Collected by Robert Bennett Bean, M.D. (1874-1944); Edited by William Bennett Bean, M.D. Third Printing, 1968)

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