Rural maternity services are undergoing rapid erosion across Canada’s more sparsely settled regions.1–3 In rural British Columbia, 17 maternity care services have closed since 2000,3 mirroring trends in other regions. The consequences of these closures are not fully understood, but studies in rural Canada and the United States have shown that women from areas that provide some level of local maternity care services have better birth outcomes than women without access to any local services, and qualitative research suggests significant psychosocial costs to rural BC women who do not have access to local services.4–8

Recent studies in BC and Alberta,9,10 and unpublished data by one of the authors (S.G.) and others, have found that maternity services without local cesarean section capability are particularly vulnerable to closure (Grzybowski S, et al, Dept. of Family Practice, University of British Columbia [UBC]: unpublished data, 2003–04). The challenge in rural communities is how to provide surgical services in the face of low volume and the absence of specialist care. An emerging solution, primarily in Western Canada, has been to rely on non-certified surgeons who have trained outside of Canada and Canadian general practice graduates with enhanced training and skills for surgical maternity services. In BC, GP surgeons currently provide care in 19 rural communities (Humber N, Frecker T, Dept. of Family Practice, UBC: unpublished data, 2005), and in Alberta in 2002, cesarean section services were provided by non-certified surgeons in 46 rural communities for 20% of all births.11

Cesarean section capability has been shown to underpin the sustainability of maternity services and is one of the key factors considered in deliberations over the maintenance or discontinuance of local rural maternity care services.5 A study comparing birth outcomes from 2 small rural communities in BC with similar populations showed, not surprisingly, that the community with cesarean section capability, even though intermittent, supported a higher percentage of local deliveries than the community without cesarean section capability. In 1986, the communities with and without cesarean section capability were able to respectively help 78% and 55% of local women to give birth; in 2000 these proportions had fallen to 61% and 55%.10 Indeed, the service that was only doing 35% of local deliveries in 2000 closed their maternity service entirely that same year.

A larger pilot study that stratified rural BC hospital services demonstrated that when GP surgeons provided local cesarean section services continuously, 85% of local women gave birth in their home communities. This compared favourably to larger rural communities served by obstetricians and/or general surgeons providing cesarean section support in which 91% of women were able to give birth in their local community (Grzybowski S, et al, Dept. of Family Practice, UBC: unpublished data, 2001.) Smaller communities served by maternity services without local access to cesarean section delivered less than 30% of the parturient population locally (Grzybowski S, et al, Dept. of Family Practice, UBC: unpublished data, 2001.) Smaller communities served by maternity services without local access to cesarean section delivered less than 30% of the parturient population locally (Grzybowski S, et al, Dept. of Family Practice, UBC: unpublished data, 2001.)
et al, Dept. of Family Practice, UBC: unpublished data, 2001). These results parallel those from Iglesias and coworkers’ work in Alberta, which documented rates of 80% local birth in GP surgery communities and 24% local birth where local cesarean section was not available.11

The sustainability considerations described above led the delegates of the 2000 Consensus Conference on Obstetrical Services in Rural or Remote Communities, in BC, to state:3

C/S capability should be maintained where it exists and consideration given to adding [emphasis ours] this capability where appropriate and feasible within the context of a regional maternity service. 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.

Similarly, a 1998 Joint Position Paper released by the Society of Obstetricians and Gynaecologists of Canada, the Society of Rural Physicians of Canada and the College of Family Physicians of Canada states:12

It would be essential for communities that presently have cesarean section capability to maintain this service until such evidence [concerning the safety of services without cesarean section capability] is available.

Based on existing evidence, it appears that the role of GP surgeons in supporting sustainable maternity services in rural communities is pivotal.3–12 Evidence on the safety of maternity services in the absence of surgical back-up is scant, and emerging data from pilot projects of isolated services in Canada’s northern regions suggest excellent outcomes in midwifery-led non-surgical services.15 However, the sustainability of most non-surgical physician-led services is in question from a health human resource perspective. This is due primarily to stress on physicians of the possibility of a bad outcome.14 In a recent study on rural care providers’ experiences of maternity care in BC (Grzybowski S, Kornelsen J, Dept. of Family Practice, UBC, and Cooper E, Oxford University: unpublished data, 2005) rural physicians in Level I communities without surgical back-up expressed consensus around the tenuousness of their practice. They acknowledged that not only were they not sustainable but also that the possibility of replacing them with someone willing to provide maternity care was small. In Level 0 communities (no maternity care), physicians reported stopping (or never engaging in) maternity care due to their discomfort in practising without surgical back-up and concerns that in the event of a bad outcome the decision to have provided services would be called into question from a legal perspective. In addition to the current medicolegal context, the current 22.1% rate15 for operative deliveries Canada-wide leads many to feel that surgical capability is a core requirement for maternity services. If this is the case, such care in smaller rural communities without the population base to support specialist care will be in jeopardy if we do not look to alternative models.

Internationally, policy-makers have committed to models of care for rural parturient women that rely heavily on the services of GP surgeons.16,17 In the United States, a 2003 position paper recommended that family physicians be supported in providing cesarean sections, particularly in rural areas where they may be the sole or major providers of perinatal care.16 As well, “procedural general practitioners” have been the focus of several research and policy initiatives in Australia over the past 5 years.18 This raises the question of why Canada has not more actively explicated a health services approach to GP surgeons encompassing training, certification and quality assurance, as has already occurred for GP anesthesia and advanced maternity skills.19,20 Currently, the challenges to accessing local training are significant and are underpinned by a lack of recognition of the role GP surgeons play in sustainable rural health. The challenges are made evident through difficulties in securing mentorship and the lack of an organized, standardized, evidence-based approach to training.

A small percentage of Canadian GP surgeons restrict their scope of practice to cesarean section, usually in communities where other surgical services are provided by a specialist surgeon. Although this model may be sustainable, it is doubtful that small communities that limit surgical procedures entirely to cesarean sections will be able to maintain the human, financial and technical resources required of an operating room. It appears that extending surgical scope to include appendectomies, surgery for complications arising from ectopic pregnancies, and other emergency and elective procedures may be an efficacious way to increase operating room volume and rationalize infrastructural resource issues.

Emerging evidence and experience suggests that GP surgeons are an important, if not critical, human resource underpinning the maintenance of sustain-
able maternity and surgical services in many rural Canadian communities. It is difficult, however, to reconcile this with a health policy and evidence framework that does not acknowledge their importance. Perhaps the Society of Rural Physicians of Canada and the Canadian Association of General Surgeons can provide the coordinated leadership to support the consolidation of this important service for rural communities.

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References


