

## Professional isolation in small rural surgical programs: the need for a virtual department of operative care

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**S**mall-town Canada depends on rural surgical services to support local emergency services, maternity services and access to basic surgical care. Despite this, rural surgical services are under siege. Communities are faced with an aging workforce in the roles of general practitioner with enhanced surgical and anesthetic skills, and rural operating room nurse.<sup>1-4</sup> There are limited opportunities for training and continuing medical education (CME)<sup>5-7</sup> and a lack of adequate infrastructure for operating rooms.<sup>8</sup>

Additionally, in the past 10 years a wave of service closures in small hospitals has been triggered in part by regionalization and the concomitant centralization of services in referral centres. This centralization has raised questions about the costs of maintaining services in small communities and the safety of such services.<sup>8-10</sup> Although the evidence that informs planning is scant, the existing research is supportive of the quality of care provided in small surgical programs in rural areas.<sup>1,11-13</sup>

Despite this, the search for administrative efficiencies can lead to ad hoc decision-making and closure of services in vulnerable small communities, leaving rural residents to travel greater distances to access basic care and, in some instances, leading to less than optimal outcomes.<sup>14</sup> When this happens, there is little capacity to foresee the cascade of unintended consequences for patients, their families and entire communities in which their health and welfare are inextricably embedded.

### THE SYMPOSIUM

With the goal of understanding the complex array of consequences to society, health and health services, general practitioner anesthetists (GPAs), researchers of rural health services and decision-makers assembled in Vancouver, BC, Sept. 23-24, 2010, to begin the process of unravelling the undercurrents of sustainable care in small rural communities, starting with the role of GPAs. The symposium was sponsored by the Centre for Rural Health Research, the Rural Coordination Centre of BC and Perinatal Services BC, and focused on the following objectives:

- recognizing and supporting the role of GPAs in sustaining safe birth in rural communities;
- documenting current experiences of GPAs in rural communities, specifically with regard to maternity care and emergency services;
- creating a structure for integrated knowledge translation by involving policy- and decision-makers; and
- formulating a plan of integrated action involving research, education, practice and policy initiatives, and establishing working groups.

### THE VIEWPOINT OF GENERAL PRACTITIONER ANESTHETISTS

The proceedings were informed by 8 GPAs from a range of rural communities in British Columbia serving catchment populations of less than 4000 to greater than 100 000. In attendance were key decision-makers (including leads of

perinatal and child health services, senior and program medical directors, and health policy analysts) from the northern, interior, Vancouver Island and Vancouver coastal health authorities, along with key stakeholders from interested organizations such as Perinatal Services BC, the Rural Coordination Centre of BC and the Ministry of Health Services.

The GPA participants noted that although call schedules varied with catchment size, these professionals were not only responsible for supporting surgical slates and emergency surgery (including cesarean delivery), but were often the highest-level providers of critical care available for consultation in their communities. General practitioner anesthetists from small communities described their sense of professional isolation and the stress of carrying a pager, knowing that when critical care is needed they will be responsible for patients' lives. The cumulative experiences of these GPAs demonstrated the remarkable contribution provided by this professional group to health care in their rural communities. This was evident not only through the array of settings in which they applied their skills, but also through the attendant discussion of the overall medical competence and confidence that their presence provided to the community.

One clear theme arising from the discussion was the lack of communication among GPAs, even those from geographically contiguous communities sharing similar practice-related problems. This recognition among the attendants naturally led to the discussion of the potential for a network infrastructure for GPAs to provide support, advocacy, profession-specific CME content and strategies that mitigate the intensity of rural practice across health authorities and across the province.

Beyond professional isolation, a number of additional common problems were identified by the GPAs in attendance. For example, although there are training programs available in Canada that lead to practice privileges for GPAs, there is a lack of academic certification and associated portability of those practice privileges. Additionally, attendants noted issues common to all of rural practice, including onerous call schedules, difficulty finding locums and challenges accessing CME. For this group, however, these challenges were more pronounced owing to their specialized skill set and had more important implications because of their wide-ranging responsibilities to emergency care in the communities.

## 104 ABORIGINAL CONCERNS

Planners and attendees recognized that the issue of

sustainable care in rural areas is of particular importance for Aboriginal patients and communities. This is because of the confluence of such communities and rural geography, but also because of the traditional kinship and community ties that exist within Aboriginal communities and the profound connection they have with the land.

### VIRTUAL BIRTHING ROOM OR SUITE

Attendees recognized that maternity services are an important dimension of surgical services in rural areas. If one considers a "virtual birthing room" to represent the number of parturient women in rural BC supported by the services of GPAs, one arrives at a figure of about 6000 of the more than 42 000 births that occur annually in the province. Cumulatively, this would be comparable to the number of annual deliveries at our largest obstetric facility, BC Women's Hospital & Health Centre.<sup>15</sup> Providers of rural care depend on local surgical services to back up intrapartum maternity services. When surgical services are unavailable the maternity service usually closes, which has a significant impact on women and their families. A more sustained impact on the community as a whole has also been noted, involving the loss of young families because of inadequate health care services, and the concomitant effect on local industry and, eventually, community life.<sup>9,16,17</sup>

By conceptualizing the collective province-wide service as a "virtual birthing suite," we move the challenges of maintaining services and potential solutions from a series of isolated problems to the realm of collective responsibility. We do this already in large hospitals, but we resist it when the "wards" are separated geographically. For example, it is hard to imagine BC Women's Hospital & Health Centre closing one of its labour and delivery units because of a staff member's illness or difficulty finding anesthetic coverage, yet we routinely close services in small communities for similar reasons.<sup>18</sup> By moving to a collective sense of responsibility and joint effort we would call upon the anticipatory planning and quick solution-finding that is the daily bread of institutional medical and nursing leadership and administration.

### CONCEPT OF WARDS

Under the rubrics of "quality assurance" and "patient safety," considerable work has already been done in larger institutions in promoting joint interprofessional engagement in finding systemic solutions in complex systems of care. These same lessons could be adapted

to a dispersed birthing or surgical suite, composed of a series of “wards,” increasingly bound by high-tech communications and distant consultation to support the onsite team of practitioners whenever a service gap appears “on the ward.” All that is lacking is the imagination to configure and support such a system. The potential benefits to patients, providers and whole communities are enormous.

## SOLUTIONS

It was clear from the proceedings that an evidence-based plan is needed to address some of the issues raised, including the following:

- creating a registry of GPAs in BC and their level of GPA-related activity (this is particularly pertinent because GPAs reported that the financial incentives for general practice outweighed those for anesthetic practice);
- identifying GPAs’ scope of practice;
- considering practice-related questions, such as why the practice life of GPAs is so short (< 5 yr on average); and
- evaluating the importance of GPA services to the quality of care provided in rural emergency departments.

These ideas reflect some of the gaps in our knowledge about GPAs that need to be filled if we are to move forward with evidenced-based planning for sustainable care in rural areas.

## COORDINATING ORGANIZATION

There is an additional need for a coordinating organization to take up the cause of rural practitioners with enhanced skills. The Rural Coordination Centre of BC, which is already charged with the task of sustaining rural health care, could play a role in advocating for and channelling resources to support small surgical teams in rural areas. The creation of a virtual department of rural operative services could be a mechanism to identify and contribute to the support needed to maintain these interprofessional teams. The activities of the virtual department would relate to quality assurance and improvement. Most importantly, the department would create a forum for the expression of local concerns about the conditions of surgical services.

The alignment of GPAs with general practitioner surgeons and operating room nurses would provide a collective voice supporting the development of interprofessional solutions to common problems faced by these service providers. This alignment of professionals would enable team development underscored by a

recognition that each provider group is interdependent and essential to the complex complement that makes surgical services possible in small communities. It is time we recognized the remarkable contributions made by rural surgical teams and created the structure needed to sustain them.

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