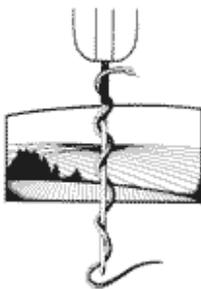


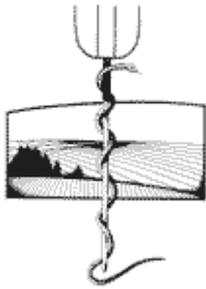
JOINT POSITION PAPER ON TRAINING FOR RURAL FAMILY PHYSICIANS IN ANESTHESIA

This paper has been prepared by a working Group of the Society of Rural Physicians of Canada
in cooperation with the College of Family Physicians of Canada
and the Canadian Anesthesiologists' Society

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***About the
Society of Rural
Physicians of
Canada***

The Society of Rural Physicians of Canada (SRPC) is the national voice of Canadian rural physicians. Founded in 1992, the SRPC's mission is to provide leadership for rural physicians and to promote sustainable conditions and equitable health care for rural communities.

On behalf of its members and the Canadian public, SRPC performs a wide variety of functions, such as developing and advocating health delivery mechanisms, supporting rural doctors and communities in crisis, promoting and delivering continuing rural medical education, encouraging and facilitating research into rural health issues, and fostering communication among rural physicians and other groups with an interest in rural health care.

The SRPC is a voluntary professional organization representing over 1,500 of Canada's rural physicians and comprising 5 regional divisions spanning the country.

“Nous soignons les régions- We care for the country”

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1. Executive Summary

All Canadians deserve timely access to anesthesia care. Family Practice Anesthesiologists (FPAs) have helped sustain rural health care in Canada. With their pivotal role in the provision of emergency, surgical, and obstetric services, and their special skills in airway management and resuscitation, family practice anesthesiologists have been an essential resource to rural communities.

There are approximately 500 to 700 FPAs in Canada, most of whom practise in Ontario, the West and the North in communities where access to specialist care is restricted. A relatively small number of FPAs are trained in Canadian medical schools in a 12 month program accessible to family medicine residents and to practising physicians wishing to return for training. Canadian programs train approximately two-thirds of practising FPAs. The remaining one-third receive their anesthesia training outside Canada. The lack of formal programs to assess the training and skills of FPAs to determine their eligibility for anesthetic privileges is problematic.

Rural Canada is poorly served by its present system of isolated, independent training programs for FPAs. It is recommended that support should be provided for University Departments of Family Medicine and Anesthesiology to provide an adequate number of training positions in Family Practice Anesthesiology to meet the needs of rural Canada. Training programs in Family Practice Anesthesiology should be nationally accredited and should provide successful trainees with verification of their qualifications which will be based on national standards and will be portable across Canada.

Participation in CME is an important way to decrease professional isolation and sustain interest and confidence. The need for formal voluntary CME programs for FPAs across Canada is critical. Without active intervention to reduce professional isolation and to sustain interest through continued learning opportunities, the shortened practice life-span and early burnout of FPAs will continue.

It seems clear that the supply of FPAs is shrinking. The explanation for this is rooted, in part, in the problems generic to rural medicine, including insufficient manpower and resources, long working hours and onerous on-call responsibilities and other commitments which are incompatible with a healthy professional and personal life. The situation is further compounded by the fact that the FPAs have found themselves to be professionally isolated. With limited opportunities for formal continuing education or professional support, FPAs have had scarce opportunities for interaction, shared experiences and mutual support with anesthesia colleagues. The end result has been burnout, with the average practice life-span of an FPA of 5 years.

In 1988, the CMA Invitational Meetings addressed many of these issues (Webber Report). <1> The recommendations which came out of these meetings are as appropriate today as they were in 1988. Unfortunately, most of these recommendations were never implemented. This, in part reflects the challenges facing existing professional organizations to represent and advocate effectively on behalf of rural FPAs.

The Canadian Anesthesiologists' Society (CAS), the College of Family Physicians of Canada (CFPC) and the Society of Rural Physicians of Canada (SRPC) are committed to working together to ensure the implementation of Canada today solutions to the problems facing FPAs in. Each is prepared to encourage the participation and representation of FPAs within its own organization. As well, the 3 organizations are committed to developing a collaborative structure and process to address matters related to Family Practice Anesthesiology.

2. Recommendations

1. Rural Canadians should have access to anesthesia services within, or close to, their home communities.
2. There should be a single standard of care in urban and rural Canada for the provision of anesthesia services.
3. A formally documented risk management strategy should be developed for each rural family practice anesthesiology service. It should include processes to identify, assess and manage risk. It must also use appropriate continuous quality improvement strategies to evaluate its effectiveness.
4. Rural surgical patients need to be informed of the advantages, limitations and risks of the local service to assist them in making an informed choice should they decide to remain in the community for their care.
5. The CAS, CFPC and SRPC, in collaboration with Canada's medical schools, should advocate for an adequate number of training positions for rural family practice anesthesiology to help meet the needs of rural Canada. Provincial funding authorities should provide an appropriate level of financial support to the applicants, the preceptors, and the Departments of Family Medicine and Anesthesiology.
6. Training programs in Family Practice Anesthesiology should be accredited and should provide verification of the qualifications of the trainees. These qualifications should be based on established national standards and should be portable across Canada.
7. At a minimum, the Departments of Anesthesiology and Family Medicine should develop a curriculum for family practice anesthesiology training programs based on the educational objectives proposed at the 1988 CMA Invitational Meetings.
8. Training programs for family practice anesthesiology should have the flexibility to incorporate community hospitals and rural faculty to provide appropriate educational experiences as proposed in the CMA Invitational meetings.

9. Applicants for entry into Family Practice Anesthesiology training programs of 12 months duration may be family medicine residents seeking a third year of training or practicing family physicians who wish to reenter the educational system for further training. Any physician registered with a Canadian licensing authority should be eligible to be considered for these positions.
10. There should be a formal realistic mechanism for the evaluation and verification of the achievement of Canada's national training standards for those family physicians who have received their formal anesthesiology training through non-Canadian programs. This is particularly true for those candidates whose clinical experience is large, but whose formal training might be less than 12 months. Provincial funding authorities should provide an appropriate level of financial support to the applicants and to the programs that provide this assessment.
11. Formal, voluntary, CME programs should be readily available to support the continuing professional development of FPAs. These programs should be fully funded by the provincial health departments with resources that are supplemental to existing CME programs for rural family physicians.
12. The CAS, CFPC and SRPC should encourage the participation and representation of FPAs within each organization (e.g. by the creation of a Section of Family Practice Anesthesiology within the CAS). As well the CAS, CFPC and SRPC should develop a collaborative structure and process to address matters pertaining to Family Practice Anesthesiology.
13. The CAS Guidelines to the Practice of Anesthesia, should be endorsed for rural practice anesthesia.
14. The principles of risk management, regionalization, disclosure, informed consent and patient choice in the Joint Position Paper on Rural Maternity Care <3> should apply without qualification, to family practice anesthesia services.

3. Introduction

“There has been, and will continue to be, a need for family practitioners with training in anesthesia to provide anesthesia services to non-urban communities, particularly in isolated areas<1>.

All Canadians deserve timely access to safe anesthesia care. This tenet is a commitment shared by all providers of anesthesia in Canada. In urban Canada, this is usually a given. For the approximately one-third of Canadians who live in rural Canada, this represents a major challenge.

What constitutes rural has been defined in various ways. In this paper, we use the following definition:

“A practical definition in current Canadian application defines “rural remote” as communities ranging from 80 to 400 km from a major regional hospital and Arural isolated@as communities more than 400 km away or about 4 hours transport time in good weather. In some of the agricultural zones of Canada, the population is widely dispersed and served by hospitals that are rural in nature but within 80 km of small urban centers. Facilities that meet these characteristics can be defined as Arural close@<3>

Rural Canada can be operationally defined as areas where family physicians provide most or all medical services. As a direct result of a relative lack of specialists in these communities, rural family physicians have to provide a broader scope of practice than their urban counterparts.

Arguably, it can be said that it is FPs, the majority of whom have been trained in Canada, who have sustained rural health care over the past decades. With their pivotal role in the provision of emergency, surgical, and obstetrical services, they have facilitated the delivery of these services in rural community hospitals. With their special skills in airway management and resuscitation, they have provided an important resource to their colleagues in rural practice. It is inconceivable that rural health care, as we know it today, could survive without an assured supply of rural family practice anesthesiologists.

Is this supply threatened? In our opinion, yes. The same problems with training, accreditation, maintenance of competence and quality assurance that prompted the 1988 CMA Invitational Meetings, still exist. Training programs are the same or shrinking. Equally worrisome, numbers of applicants are down. Practicing rural anesthesiologists continue to feel isolated and feel a lack of support from the universities, colleges, and professional societies. Recent restrictions on the supply of foreign-trained graduates have increased the need for Canadian programs to train a sufficient number of FPs. In this paper we review these issues, including the 1988 meetings <1>. We make a number of recommendations, sometimes building on, but sometimes changing, the 1988 recommendations.

4. Demographics

i) Canadian Anesthesiologists' Society (CAS)

In 1996 the CAS identified all physicians providing anesthesia services in Canada as of December 31, 1995. A 4 page, 17 question survey was mailed to these physicians requesting information on demographics data, clinical practice patterns, funding sources and workload issues.<4>

There were 487 family physicians identified as providers of anesthesia services. Almost 85% were located in Ontario, the Prairies, or British Columbia. Just over half (52%) were under 45 years of age. Most (78.5%) provided less than 16 hours per week of anesthesia. Just over a quarter (28.7%) delivered less than 8 hours of anesthesia weekly. The majority, including those providing less than 8 hours of anesthesia per week, provided obstetric analgesia services.

A similar study by the CAS in 1986 identified 523 family physicians providing anesthesia. However, they excluded those physicians providing less than 8 hours per week of anesthesia or less than 200 anesthetics per year <4>. Extrapolating from the 1996 survey, this would have excluded at least 212 FPAs. Overall, the CAS data document a decrease in the supply of these practitioners B 723 in 1986 to 487 in 1996 (32.6%).

ii) Society of Rural Physicians of Canada (SRPC)

In a study commissioned by the SRPC, Iglesias et al <5> reviewed physician's billing data recorded by the Canadian Institute for Health Information (CIHI) for 1995/96. The National Physicians Data Base contains information not only on services and billings, but also on demographic characteristics of these physicians. The authors used a functional definition of rural, identifying those communities where, without specialist staff, rural family physicians provide most or all medical services.

In 1995/96 anesthesia services in rural Canada were provided by 498 FPAs and 123 specialist anesthesiologists. Together they provided 249,364 services representing 6.3% of all anesthetic services in Canada. Of these 249,364 services, 151,168 (60.2%) were provided by FPAs, mostly in Ontario, the west, and BC. Of these 498 FPAs, 315 (63.3%) were trained in Canada. The average number of anesthetic cases handled by FPAs was 323 per year (versus 797 for specialist anesthesiologists).

iii) College of Family Physicians of Canada

Using survey data collected for the College of Family Physicians of Canada's National Family Physician Workforce Database, 751 FPAs were identified. Of these, 604 located their practice in rural or small town Canada and the remainder, 183, were urban practitioners.<6>

In summary, there are approximately 500-700 FPAs in Canada, most of whom practise in rural communities where access to specialist care is restricted. Moreover, the CAS data document a large reduction (32.6%) in the numbers of these FPAs between 1986-1996.

We cannot discern, from available data, why the role of family practice anesthesia is shrinking. There are several possibilities. First, as Canada's population becomes more urban its medical procedures will become more urban based. Second, new and advanced procedures, developed in cardiac, neurology, and transplant surgery among others, will always, appropriately, have an urban bias. Third, and less appropriately, new, minimally invasive surgical technology for emergency and elective surgery for ectopic pregnancy, appendectomy and cholecystectomy has not been readily available in rural Canada. As has been argued elsewhere, rural Canada has the same rights of access to new, albeit expensive technology as does urban Canada <7>. Fourth, the more insidious difficulties with the recruitment and retention of rural physicians (economic, social, educational and professional) affect those rural family physicians considering family practice anesthesia. Fifth, the additional year of training required in order to practise anesthesia is a significant time commitment for residents unless they use these skills regularly and are fairly compensated for these services once in practice. And last, the several issues identified in the 1988 Meetings related to training and lack of professional support for family practice anesthesia continue to discourage entry and facilitate the exit of rural physicians from the practice of anesthesia.

5. Benefits of Family Practice Anesthesia

“ Manpower planning in Canada will continue to be seriously compromised unless the medical needs of the Canadian people can be met by Canadian physicians through appropriate social, economic, organizational, and educational incentives to prepare and retain physicians in our non-urban communities. This report deals with a crucial educational issue since the availability of anesthesia services is pivotal to the provision of other kinds of medical services, particularly surgical, obstetrical, and emergency services.” <1>

The provision of obstetrical, surgical and emergency services in rural Canada depends on local access to anesthetic services. The two Joint Position Papers <3,8> developed between rural physicians and specialist obstetricians document the poorer outcomes associated with the loss of local maternity care programs and propose the training programs required to support rural obstetrics with family physicians trained in operative delivery. Clearly, this requires the support of rural FPAs.

Similarly, optimal surgical and emergency care in rural Canada, where communication links with referral hospitals are distant and vulnerable, requires that essential services, such as appendectomy, be available in these hospitals. Rural anesthesiologists are needed to support these services.

In addition, we recognize that family practitioners with proficiency in anesthesia benefit their colleagues and their communities in a number of other ways. Their skills with airways, fluids, analgesia, intubation and resuscitation make them an important resource for their colleagues.

Rural hospitals, which are able to offer essential anesthetic and surgical services, play a critical role in sustaining medical care, both in their own communities and in neighboring towns which have not been able to maintain these services. Essentially, the health care team, including the physicians, the nursing staff and the support personnel, become accustomed to managing sick patients. Their skills, their confidence and their trust in each other is maintained at a high level. Conversely, without the ability to perform a cesarean section or an appendectomy, and without anesthetic staff able to assist with airways, trauma and the stabilization of the critically ill, these institutions, including their medical and nursing staff, lose their confidence and their inclination to take care of sick patients. The acuity of care in these institutions falls dramatically. They become accustomed to caring for reasonably well patients.

6. Canadian Training Programs for FP Anesthesiologists

In 1999, there were 14 physicians <9> enrolled in the 12 month program (1998-11; 1997-18; 1996-20; 1995-14; 1994-10). These were funded either through a PGY3 program in Family Medicine or through underserviced area programs. Some made a concerted effort to focus on a rural curriculum.

Most of these programs are undersubscribed. Each year, several positions go unfilled. The explanation is multifactorial. The general malaise in all of rural medicine because of lifestyle and remuneration issues and low morale amongst FPAs provides a partial explanation. In the absence of appropriately trained Canadian physicians, rural Canada depends on overseas graduates for approximately one-third of its FPAs <5>.

7. The Problem

i) Scarcity of Family Practice Anesthetists

A survey <10> of 35 small Ontario hospitals, done in 1988 and repeated in 1995, documented a large and significant decrease in the number of family practice anesthesiologists - 88 to 67. There were associated significant decreases in the availability of general anesthesia, general surgery, caesarian section and intra-partum maternity care services.

“There were fewer GP Anesthetists in 1995 compared with 1988 with hospitals often going from 2 or 3 FP Anesthesiologists to 1 or 2. This decrease makes a significant difference to the time that can be shared for being on-call for FP AnesthesiaY It also impacts on the availability of anesthesia services for other acute emergencies such as trauma.”

Similar supply problems have been documented in other provinces <11,12>.

A follow-up study in graduates of a FP Anesthesia program revealed that the average “anesthesia practice life span” is approximately 5 years <13>. A follow-up of this group to the year 1996 by one of the authors (ND) revealed that 68 (57.6%) of the original trainees were not practising any anesthesia. Of the remainder, 37 (31.4%) were still providing family practice anesthesia and 13 (11%) had become specialty anesthesiologists.

ii) Canadian Training Programs

Slightly more than one third (37%) of rural family practice anesthesiologists received their training outside Canada <14>. With new restrictions instituted by the licensing authorities affecting the supply of these physicians, Canadian medical schools need to increase the number of postgraduate training positions available in family practice anesthesiology. However, reality is that these programs and positions are static. We face a supply crisis in rural family practice anesthesia.

iii) Foreign Graduates

When rural and remote communities are successful in recruiting family physicians from outside the country who have training in anesthesia, it is very difficult for such physicians to receive evaluation and certification for their skills. The pioneering work in Saskatchewan with advanced maternity skills is an example of how one province has been able to put in place, concurrent with its training programs for advanced skills for family practitioners, a mechanism for the assessment and certification of physicians trained elsewhere.

iv) Professional Support

Despite the promises of the 1988 CMA Invitational Meetings, the professional isolation of rural family practice anesthesiologists continues. The graduates of the programs leave without any formal provision for continuing education, practice audits, peer reviews, or continuing quality assurance. Professionally isolated, these FPAs have few occasions for interaction, shared experience and mutual support with anesthesia colleagues. Burnout and the subsequent exit from anesthesia and/or rural practice are frequent. If there is a future for rural family practice anesthesia we must anticipate and provide for the continuing education and professional support of the graduates.

v) Remuneration, On Call, and Lifestyle

Rural medicine is suffering from an accumulated burden of insufficient manpower and resources, responsibilities of long hours, including significant on-call responsibilities, and professional commitments which are incompatible with a healthy personal and family lifestyle. Additional training in advanced skills, while beneficial, can also add significantly to the responsibilities of rural family physicians. These physicians, once trained in anesthesia, surgery or operative delivery, must then provide coverage for the operating rooms and maternity wards that is simply an add-on to their on-going office and ER responsibilities. Without recognition and remuneration, and without creative provision for off-call interludes, there will be diminished interest in acquiring this training and increased attrition rates for those currently in place.

The rural FPA faces special problems with fee schedules. Remuneration is set based on the urban model of a specialist anesthesiologist practicing in a hospital without any expenses for an office and staff. FPAs must pay this overhead. It is the reality of rural practice that the anesthetic staff endure an income loss when providing these skills in the community hospital, compared to their colleagues who remain in their offices.

Members of this Working Group found considerable merit in the proposal that remuneration for practising physicians enrolled in training programs in family practice anesthesia should be significantly greater than for an R3 position. This would recognize the critical connection between family practice anesthesia and rural medical care and would provide some incentives to increase the interest in Canadian training programs.

8. 1988 Invitational Meetings on the Training of General Practitioners/Family Physicians to Provide Anesthesia Services

In 1986, the Alberta Chapter of the CFPC brought several resolutions to the CFPC Board of Directors which were strongly supported by all provincial chapters.

“Opportunities for postgraduate training for FP anesthetists were decreasing. Trainees were being forced to accept one-year programs. Some of the training being offered was inappropriate. Practicing FP anesthesiologists often could not obtain good CME, and felt isolated and lacking support from their anesthesia colleagues in the larger centers.” <15>

These resolutions were widely circulated and stimulated vigorous debate between, on one hand, the CFPC and, on the other, the Association of Canadian University Departments of Anesthesia (ACUDA) and the Canadian Anesthesiologists’ Society (CAS). Because of a perceived schism between the academic anesthesia community and the family practitioners who provide anesthesia services in rural Canada, the CMA took on the role of the “honest broker” and set up an invitational committee chaired by Dean William Webber of UBC. The following organizations sent representatives:

- The Association of Canadian Medical Colleges (ACMC)
- The Association of Canadian University Departments of Anesthesia (ACUDA)
- The Canadian Anesthesiologists' Society (CAS)
- The Canadian Association of Interns and Residents (CAIR)
- The College of Family Physicians of Canada (CFPC)
- The Canadian Medical Association (CMA)
- The Federation of Medical Licensing Authorities of Canada (FMLAC)
- The Royal College of Physicians and Surgeons of Canada (RCPSC)

Data support was provided principally by the Manpower Section of the CMA and the Health Information Division of Health and Welfare Canada (now the Canadian Institute for Health Information - CIHI). The CMA, using the 1986 Physicians Manpower Survey, provided a demographic profile of Canada's FPAs: gender, age, location of practice, country of graduation, province of residence and number of hours per week devoted to anesthesia practice. Health and Welfare Canada provided a national picture of the volume of anesthesia services provided by family practitioners and certified anesthesiologists from 1977/78 to 1985/86. These services were provided in rural hospitals by family physicians who, with the exception of Quebec, reported 20 hours or less of anesthetic services per week. In Quebec, 55% of FPAs provide more than 20 hours per week.

Both the provinces of Saskatchewan and Ontario provided data on procedures and patients served by family practice anesthesia. For methodological reasons this data was inconclusive other than to confirm the widespread perception that emergency and obstetrical services represent a large portion of family practice anesthesia.

A literature review was performed and was directed at 1) outcomes of family practice anesthesia and 2) whether there is a critical number of cases below which practitioners should not provide anesthesia services. No reliable information on either issue was found in the world literature.

Representatives of the CFPC, ACUDA, and CAS managed to agree on a set of educational objectives for the training of FPAs (Appendix I). All of the organizations agreed that, to accomplish these objectives, it would require 8 to 9 months of postgraduate training. A return to the 6-month programs was not a credible stance, despite their apparent success in the past. The recommendation by ACUDA for a 12-month period of training was accepted.

What about the other issues raised by the Alberta Chapter of the CFPC? At the conclusion of the meetings the CFPC was very optimistic.

“The organizations representing Canadian medicine now all agree on the need to provide adequate numbers of funded residency programs for the training of FP anesthetists. The training does not need to be continuous; ideally, it should start during the elective time in the second year of the FP residency program. The training must be appropriate to the educational objectives of FP anesthetists and will have to take place in clinical settings where this aim can be achieved, including the approval of new community-hospital training sites where indicated...there is now a renewed commitment of support for the practicing FP anesthetist...teachers of anesthesia may travel to smaller centers on a regular basis, that telephone “hot lines” may be available for urgent consultations, that the services of locum tenens may be provided...” <15>

Clearly, these good intentions failed to materialize over the subsequent decades. In our view, this, in part, reflects the lack of any professional organization or university department to which FPAs can belong. More generally, any rural physician who acquires advanced skills, from a professional point of view, is presently homeless. Although specialty departments provide the training, graduates have no base in the department, or in their professional societies, or in the Royal College. Once trained, they are “orphaned”. Although trained in Family Medicine, their practice profiles set them outside the scope of the Departments of Family Medicine. When professional issues related to training standards or competency are on the table, there is no professional or academic group to represent physicians with advanced skills. Equally important, no one has the responsibility to stand up for the rural communities served by these physicians. It is our hope that with the further development of structures within and between our organizations to encourage the participation and representation of FPAs and with the adoption of formal national programs for training, accreditation and continuing medical education, much can be done to accomplish the goals of the 1988 Meetings.

9. Length of Training

Presently in Canada there are no opportunities for FPAs to receive anything less than 12 months of training. The CAS strongly believes that this is the minimum amount of time required to assure that rural FPAs meet acceptable standards of training and safety. The CAS strongly believes that 12 months is the minimum amount of time required 1) to provide an appropriate breadth of case-mix exposure 2) to allow proper evaluation 3) to stimulate the “overlearning” - repetitions beyond the point of technical competence - that will prevent erosion of skills in a small volume practice and 4) to assure that rural FPAs meet acceptable standards of training and safety.

By contrast, the SRPC and the CFPC have advocated, in all areas of training in advanced skills, that training be competency-based. This requires that the amount of training should vary with the pre-existing capabilities of the student, their own capacity to learn and the anticipated role that these physicians will play in their community. The length-of-training in their view could be accomplished within a range of 6 to 12 months.

The respective viewpoints are strongly and honestly held. Unfortunately, there is no evidence anywhere that would help resolve these length of training issues

10. Continuing Medical Education (“A Lifetime of Learning”)

i) Numbers

In the 1988 CMA Meetings and in the design of an Australian program considerable attention was paid to the question of whether a minimum caseload was essential to maintain competence. In both instances, the proposal for a minimum caseload was discarded. This partly reflects the absence of any evidence in the literature linking competency and caseload. It also reflects a different approach to competency based on continuing education, audit, peer review, and quality assurance.

There is some evidence in other fields that rural family physicians who have acquired competence in a procedural skill e.g. cesarean section, can maintain their skills with relatively few annual cases - as few as 5 per year <16>. It seems to be the extent to which the skill was practised during the initial learning phase - i.e. repetition past the point of learning - that prevents the erosion of the skill <17>.

Anesthesia is not alone in its emphasis on continuing education and quality assurance programs. The Society of Obstetricians and Gynecologists emphasize this same approach and deliberately do not require a minimum number of deliveries to maintain competence <18>.

ii) Professional Development

Without active intervention to reduce their professional isolation and to sustain their interest through continued learning opportunities, the shortened practice life spans and early burnout of FP anesthesiologists will continue. Participation in CME programs is an important way to decrease professional isolation and to sustain interest and confidence. There is an urgent need across Canada to further develop formal voluntary CME programs for FPAs. These programs should be accredited appropriately. Practising rural anesthesiologists should be encouraged to participate in these programs on a regular basis in keeping with their individual needs.

One of the main objectives of CME programming for FPAs is that it will help sustain their commitment and reduce their professional isolation. These programs should be fully funded with resources that are supplemental to existing CME programs for rural family physicians. These same CME programs should also include some provision for funding locum anesthesiology services to sustain community services while physicians are absent for further training.

FPAs should be encouraged to include these CME programs as part of their continuing professional development activities. It is equally important, however, that these FPA CME programs remain voluntary to avoid creating an onerous burden on FPAs which might paradoxically create disincentives for them to continue to provide anesthesia services.

11. Standards of Care

All providers of anesthesia are committed to the highest possible standards of care in rural or urban Canada. The CAS Guidelines to the Practice of Anesthesia <2> should be endorsed as appropriate for rural family practice anesthesia.

There is merit in devising a process whereby both rural and urban family practice and specialty anesthesiologists could collaborate on future guidelines.

12. Curriculum

For the 1988 CMA Meeting, recommendations were made by the Association of Canadian University Departments of Anesthesia (ACUDA) and the College of Family Physicians of Canada (CFPC) regarding educational objectives for family practice anesthesia (Appendix I). These represent a generic curriculum for training programs in family practice anesthesia.

13. Principles of Rural Family Practice Anesthesia

The following principles were first developed in the Joint Position Paper on Rural Maternity Care <3>They are equally applicable to the provision of anesthesia services in rural community hospitals.

i) Regionalization. FPs administer planned anesthesia to low-risk patients and for low-risk procedures. The relevant model is our perinatal care system where a proportion of pregnant women identified as high risk are transferred for care to a centre competent in the level of care required.

ii) Risk Management. Risk can never be completely avoided. Some patients at increased risk can be identified and transferred for care. The responsibility for management of complications and risk in the provision of family practice anesthesia rests with the local hospital. Professional staff and the local hospital boards need to develop and maintain a comprehensive system to deal with complications. Practice and procedures should be evidence and guideline-based. In addition, a formal risk-management process should be in place. Risk management is a continuous process. It starts with the identification and analysis of risk, proceeds to the establishment of actions to minimize risk and evaluates the results, which leads to further identification and analysis in a cyclical fashion of continuous quality improvement

iii) Disclosure, Informed Consent, Patient Choice. Our patients, and their care Providers, should be partners in choice. Informed consent requires full disclosure to patients of the advantages, limitations and associated risks of the local surgical and anesthetic services.

14. Organizational Commitment and Support

The CAS, CFPC and SRPC should encourage the participation and representation of FPs within each organization. As well they should develop a collaborative structure and process to address matters pertaining to family practice anesthesiology.

The CAS stands prepared, should sufficient numbers come forward to support a Section of FP Anesthesiologists within the CAS. The CFPC will commit resources towards accreditation of training programs and CME activities and will provide opportunities for FPs and Anesthesiologists to meet annually at the time of their Family Medicine Forum. As well, the collaboration of the 3 organizations would ensure that a rural family practice perspective would be included in the development of anesthesia guidelines.

References

1. Webber W, chair. Report of the Invitational Meetings on the training of general practitioners/family physicians to provide anesthesia services. In: Reports to the General Council of the Canadian Medical Association, Appendix B. Canadian Medical Association annual meeting; 1988 Aug 22-24; Vancouver.
2. Guidelines to the Practice of Anesthesia. 1999. Supplement to the Can J Anesth Vol 46(11). November 1999.
3. Rural Obstetrics: Joint Position Paper on Rural Maternity Care. Can J Rural Med 1998, 3(2): 75-80 and Can Fam Phys, 1998, 44: 831-36 and SOGC Journal, 1998, 72: 393-98.
4. Donen, N. CAS Survey 1996. Canadian Anesthesiologists Society. Unpublished.
5. Iglesias, S, Stratchan J, Ko G, Jones LC. Advanced Skills by Canada's Rural Family Physicians. Can J Rural Med. Vol 4 No 4, Fall 1999.
6. The JANUS Project. College of Family Physicians of Canada.
7. Position Paper on Training for Family Physicians in General Surgery. Society of Rural Physicians of Canada. Unpublished. 1998
8. Joint Position Paper on Training for Rural Family Practitioners in Advance Maternity Skills, Including Cesarean Section. SOGC Journal, 1999, 80:985-94 and Can Fam Phys 1999, 45: 2416-22 and Can J Rur Med 1999; 4(4): 209-216
9. Survey. Canadian Anesthesiologist Society. 2000. Unpublished
10. Rourke, J. Trends in Small Hospital Obstetric Services in Ontario. Can Fam Phy 1998; 44: 2117-24.
11. White, IWC et al. Anesthesia Manpower in Manitoba 1989. Physicians in Canada. Proceedings of the 4th and 5th. Physicians Manpower Conferences. Vol III: 7-13. Canadian Medical Association. Ottawa. 1993.
12. Morris, GF, Yip, RW. The Influences of Health Care Reform in GP Anesthetic Services in Saskatchewan. Can J Anesth 1998; 45: A57.
13. Donen, N. Family Practice Anesthesia B A Follow Up. Can J Anesth 1995; 42: A49B.
14. Chiasson, PM, Roy PD. Role of the General Practitioner in the Delivery of Surgical and Anesthesia Services in Rural Western Canada. Can Med Assoc J 1995, 153(10): 1447-53.
15. Perkin, RL. Family Practice Anesthesia. Can Fam Phys 1988. Vol 34: 2105.
16. Deutchman, M et al. Outcomes of Cesarean Sections Performed by Family Physicians. J Am Board Fam Pract 1995, 8(2): 81-90.
17. Jackson, WD. Diamond, MR. Procedural Medicine: Is Your Number Up? Australian Family Physician 1993, 22(9): 1633-39.
18. Guideline: Number of Deliveries to Maintain Competence. Society of Obstetricians and Gynecologists of Canada. November 1996.

APPENDIX I *

Educational Objectives

To Prepare Family Practitioners to Deliver Anesthesia Services. Developed by the College of Family Physicians of Canada and the Association of Canadian University Departments of Anesthesia.

Anesthesia Skills: General Requirements

Administering anesthesia requires knowledge and skills for maintaining and controlling the cardiorespiratory function of patients who are relatively well or for patients with single or multisystem dysfunction or failure. The person who administers the anesthetic must know the effects of various pharmacologic agents on these patients. These skills are necessary during surgical procedures but are also required in other clinical situations.

Preanesthetic Assessment:

It is especially important for the FP anesthetist to carefully screen patients pre-operatively to determine their physical status (ASA category) and suitability for surgery. This allows the practitioner to identify cases that may be beyond the capabilities of either the anesthetist or the facility. The FP anesthetist must be able to recognize which patients require immediate stabilization and transport to tertiary care facilities. In addition, the circumstances in which a delay in surgery is advised must also be understood.

The FP anesthetist must understand the pathophysiology of the patient's disease process and its relation to anesthesia and surgery, and be able to make use of appropriate examinations and laboratory tests.

Airway Control:

The FP anesthetist must be skilled in acute resuscitation of patients with airway obstruction, cardiac arrest, multiple trauma, shock of any origin, burns, and other medical emergencies and in neonatal resuscitation. Some of these skills may be learned through training pathways such as Advanced Trauma Life Support (ATLS) and Advanced Cardiac Life Support (ACLS) programs. To maintain these skills, it is essential that the physician continue to use them in elective situations.

Ventilation:

The management of patients requiring a ventilator is necessary for short-term care in the rural setting and for care during transport. In the intensive care setting, the FP anesthetist must be skilled in the management of mechanical ventilation, non-invasive and invasive monitoring and appropriate pharmacotherapy for chronic, acute or emergency respiratory problems.

Cardiovascular Status:

The cardiac status of the anesthetised patient must be assessed, continually monitored and managed with appropriate drug therapy. The FP anesthetist must be skilled in acute resuscitation during cardiac arrest.

The above skills are particularly important in non-urban areas, to maximize the care of patients with limited staff.

Anesthesia Skills: Specific Applications

Surgical

To provide anesthesia during surgery the FP anesthetist must be able to:

- select a safe and effective anesthetic technique;
- select appropriate invasive or non-invasive monitoring methods, and use additional equipment as required;
- safely conduct intraoperative management;
- effectively manage complications of anesthesia within prescribed limits;
- select and supervise appropriate post-operative management of the patient;
- know when it is appropriate to transfer the care of the patient to someone else;
- use anesthesia equipment and demonstrate an understanding of its principles and basic maintenance;
- respond to the special needs of specific groups of patients such as newborns, children, pregnant women, geriatric patients and ambulatory patients.

The FP anesthetist must be able to respond to:

- emergency anesthesia (situations in which the risk of further illness or death would increase during transportation);
- urgent anesthesia (when the safety of the patient might be compromised during transportation);
- elective anesthesia (to maintain surgical/anesthetic support skills for the convenience of the patient and the community)
- anesthesia backup (in regional centres unable to attract and support a full complement of Royal College certified anesthetists).

Trauma Management

In the area of trauma management, the FP anesthetist must be skilled in airway management, cardiorespiratory stabilization, insertion of vascular lines, assessing the status of the patient, evaluating the urgency of surgery, and ventilation management, as well as in the identification and management of life-threatening emergency situations.

Obstetrical Anesthesia:

The FP anesthetist must demonstrate skill in epidural anesthesia for the management of pain during labour and delivery and for cesarean sections, manage the complications of pregnancy requiring an anesthetic (spontaneous abortion, antepartum hemorrhage, premature labour, fetal distress, prolonged second stage), and be able to provide neonatal resuscitation and meconium aspiration.

Medical Management:

The FP anesthetist must be able to demonstrate appropriate management of acute or chronic cardiac arrhythmias or myocardial infarction; management of acute or chronic respiratory disease; short-term ventilation and the pre-operative screening of patients requiring referral to another centre.

Social and Ethical Considerations in the Rural Setting:

The availability of anesthetic and surgical services improves the convenience of health care in rural communities. In addition, surgery in community hospitals maintains a base of expertise and skills in rural areas and reduces the patient load in urban centres.

The physician's personal responsibility for continuing medical education and skill development must be instilled during training. All physicians should be aware of the problems of impairment by fatigue or by chemical dependence and of the need for quality assurance and peer review.

Summary

In summary, the goals and educational objectives are to provide pre-anesthetic assessment of the patient and to determine the levels of anesthetic risk to provide competent safe anesthesia for patients requiring "non-radical" surgery, to provide management of emergency situations requiring anesthesia skills (cardiac arrest, trauma, obstetric problems, stabilization for transport) to coordinate transfer as necessary, and to fully recognize the limitations of self and facility.

To fulfill these educational objectives the anesthetist directly responsible for the FP anesthetist's training should ideally have a special interest in or knowledge of rural anesthesia to facilitate the development of the skills most useful in a non-urban practice.

Sessions should be designed specifically for the FP anesthetist to systematically review the physiology, pharmacology, equipment, complications and other areas that will be needed in the community.

Finally, the onus is placed on the FP anesthetist to update professional skills where required, and to know one's own limitations.

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