

From Education to Sustainability: A Blueprint for Addressing Physician Recruitment and Retention in Rural and Remote Ontario

Part 1

ACKNOWLEDGEMENTS

The Blueprint participants would like to thank the Ontario Regional Committee of the Society of Rural Physicians of Canada and the Professional Association of Internes and Residents of Ontario for bringing us together to complete this joint project. We are grateful as well to the Southwestern Ontario Rural Medicine Unit for providing extensive information and support in the development of this document. PAIRO and the SRPC would like to thank the participants who gave generously of their time and expertise to develop the recommendations in this Blueprint.

EXECUTIVE SUMMARY

The past decade has witnessed a dramatic increase in awareness of the difficulties of providing medical care in rural and remote areas. This has been accompanied by the development of various piecemeal initiatives in an attempt to address the problems of recruiting and retaining physicians. Because these initiatives have been implemented with inadequate attention to their feasibility, effectiveness and how they fit and work together in an integrated plan, they have been unsuccessful in redressing the mounting imbalance between physician resources and community need.

We know that Ontario's rural and small town population continues to increase (by over 10% in the last decade), while the number of doctors in rural and remote Ontario continues to decline (by over 10% between 1994 and 1997 alone). There are a variety of factors which account for the current obstacles to effective recruitment and sustainable retention of physicians. Ultimately, the public policy task is to develop a comprehensive, integrated package of measures which will remove these obstacles. Failure to take urgent action to address the current imbalance will result in serious further decline in the number of rural generalist and specialist physicians, and the vital services that they provide.

Ultimately, the fact remains that the well-trained generalist rural physician provides the core of medical care to just under one-quarter of the population of this province, spanning the vast majority of Ontario's geographic area. The Ministry of Health itself has acknowledged that access to quality health care in Rural and Northern Ontario will require improved strategies for training, recruiting, retaining and supporting rural health providers and facilitating education and training an adequate number of rural physicians.

Recognizing the need for a comprehensive Blueprint to address physician recruitment and retention in Ontario's Rural and Northern communities, a group of knowledgeable and committed representatives of rural medicine and medical training met in April, 1998 under the joint sponsorship of the Ontario Regional Committee of the Society of Rural Physicians of Canada and the Professional Association of Internes and Residents of Ontario (PAIRO). Over the next seven months, drawing on its collective expertise and experience, the group worked together to produce this Blueprint.

The Blueprint is intended to provide a comprehensive and integrated package of measures which, if implemented as a whole, would address the need for effective and sustainable physician recruitment and retention in remote and rural communities.

We begin with an overview of the extent and magnitude of the present problem, including underlying demographic trends (both in the general population at large and in the physician population in particular) as well as a summary of the current needs for physician services.

We then turn to the heart of the Blueprint. In twenty seven key areas involving rural medical education and rural medical practice, the Blueprint identifies the present obstacles and barriers to improved recruitment and retention, explains why present strategies have not worked, reviews those strategies which have demonstrated success in other jurisdictions, and recommends specific measures for implementation.

One of the key features of this Blueprint lies in its comprehensive and integrated approach. The Blueprint commences with key foundation issues, examining the medical education life cycle of the rural doctor. This begins as early as secondary school education, through selection to medical school, undergraduate medical education, residency training, re-entry and advanced skills training for established physicians, training rural physicians as medical educators and continuing medical education.

The goal is to remove barriers and reduce disincentives so that training opportunities for rural medical practice can be optimized, to increase the number of choice points for individuals to enter the field of rural medicine and develop and enhance their skills, and to equip future and established rural physicians so that they can provide the broad scope of care required of them.

After building a solid foundation, the Blueprint then addresses the structure: the life cycle of the practising rural doctor, both generalist and specialist. It highlights the many existing barriers and disincentives, recommending viable strategies to overcome them. The discussion of rural practice includes remuneration and various working conditions, rural medical practice supports (including specialist back-up, medical informatics, telephone triage, licensure issues, and the role of allied health professionals) and spousal and family concerns. Here, the goal is to ensure that the resulting structure for rural practice is free of the perpetual cycle of physician burnout, and the resulting crisis of failed physician recruitment and retention.

Finally, the Blueprint turns to the infrastructure needed to implement and sustain successful recruitment and retention measures, including a new Rural and Remote Areas Program. To be workable, this new structure must be as simple, responsive, and transparent as the Blueprint is comprehensive and integrated.

The unifying principles of this document strive to create sustainable working conditions for rural doctors, and provide equitable health care for rural citizens. The hope is to develop centres of medical excellence throughout Rural and Northern Ontario. Only then will the access to quality care be a sustainable reality.

As with any Blueprint, there are many groups whose participation is essential to building a sound structure, in this case a new way of recruiting and retaining physicians. The participants in the preparation of this Blueprint are hopeful that it will provide the impetus to allow all of these groups (including government, the medical profession and its associations, communities and community organizations, universities, hospitals and municipalities) to work together to build sustainable working conditions for rural physicians, and provide equitable health care for all Ontario's citizens.

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I INTRODUCTION

On April 4th and 5th, 1998, at the invitation of the Ontario Regional Committee of the Society of Rural Physicians of Canada (SRPC) and PAIRO (Professional Association of Internes and Residents of Ontario), a group of physicians in practise and training, medical students and other experts¹ met to develop a Blueprint of strategies and initiatives needed to remedy the longstanding problem of recruiting and retaining physicians in Northern and Rural communities. The group focused on practical solutions, asking practical questions of what has worked, and what has not worked, in Ontario and in other jurisdictions.

In fact, in June, 1997, the Ontario Ministry of Health released its policy document, Access to Quality Care in Rural and Northern Ontario - The Rural and Northern Health Care Framework. That document states that implementation of the Rural and Northern Health Care Framework will require improved strategies for training, recruiting, retaining and supporting rural health providers including physicians, specialists and specially trained nurses¹ and ifacilitating education and training an adequate number of rural physicians¹.

As a result, the group believed that this was now an opportune time to provide the Government and various other stakeholders (including educators, hospitals, communities and physicians) with a roadmap for more effective recruitment, retention, support and education initiatives. This seems particularly timely, given the increasing number of designated underserved communities in rural Ontario, coupled with the absence of any significant change in the Government's traditional piecemeal approach and programs.

In this context, the recommendations that follow lay out a Blueprint for a comprehensive and integrated package of measures, beginning with initial recruitment to medical school, through residency programs that effectively train physicians for rural and remote practice, and measures to ensure that established

physicians are provided with the support and resources required to break the perpetual cycle of burn-out and crisis which has plagued Northern and Rural areas for decades.

Effective measures must also take account of underlying demographic trends, including the aging physician population currently serving Northern and Rural Ontario, as well as the reality that new physicians (including an ever increasing number of female physicians who are more likely to practise primary care) are increasingly concerned with maintaining a sustainable practice by balancing lifestyle and family with work demands.²

Ultimately, accessible, quality medical care is dependent on an adequate number of appropriately trained and distributed physicians or 'critical mass'³ working within an integrated, supported health care system. The need for a large enough critical mass of physicians in rural communities has been recognized by various reports in this area, including the Scott⁴ and NAWG reports.⁵

Closely tied to the need for self-sufficiency and critical mass is the objective of self-sustaining 'local centres of excellence'. The term 'centres of excellence' has most often been equated with the cluster of specialty/high tech services that have evolved in large cities and around Academic Health Science Centres. However, many Rural and Northern area facilities have always been or have become centres of excellence. That is to say that the care given there, within their scope of practice, has been exemplary and the outcomes as good or better than in large high tech centres. This has been achieved through the diligence of the health care providers and with the support and vision of their local communities. Key features found in these local centres of excellence include the maintenance of a critical mass of physicians through their participation in teaching, organization, planning and contribution to policy generation.

Why talk about rural centres of excellence? Because it allows the vision of rural health care to be 'turned on its head'. Rather than the goal of trying to entice physicians to go to communities that are underserved, disadvantaged and struggling, the goal becomes the highest quality medical care through the provision of critical mass physician staffing adequate for professional and administrative activity, education (of students, residents, nurse practitioners as well as continuing medical education), locum provision, research and acceptable lifestyle.

As has been repeatedly emphasized, and repeated since the recognition of the need to improve access to rural medical services, 'recruitment and retention will no longer be a problem, if we make it a job someone would want'.⁶

How this could be done is the subject of this Blueprint.

II DEMOGRAPHIC OVERVIEW

A. INTRODUCTION

By the 1970's, many rural 'baby boomers' had left rural Ontario to find jobs in the cities. However, baby boomers are now increasingly moving back to rural areas. This is expected to peak the rural population by the mid 2010's, producing peak rural health care demands as baby boomers age.⁷

Meanwhile, current trends suggest that there may be few physicians left in rural areas to care for that population. Traditionally, the capacity of family practice programs across the country to produce rural physicians has been low. The percentage of certificants of the College of Family Physicians of Canada in Ontario practising with a rural address in 1998 is only 7.9%. The low number of family physicians entering rural practice, combined with attrition of existing rural physicians to retirement, specialist residencies, urban areas and abroad, resulted in a drop in rural Ontario GP/FPs numbers between 1994 and 1997 of 12% (138 physicians). Rural specialists experienced a similar percentage decline.

This worrisome trend is compounded by changes in medical care delivery. Younger physicians are increasingly unwilling to tolerate the excessive workload and on-call responsibilities that have often led to burn-out of their established physician colleagues, particularly given the increasing number of physicians - both male and female - committed to balancing work with family and personal commitments. New family physicians are also less likely to be trained to practise special skills needed in rural areas, such as anesthesia, obstetrics and surgery. Unfortunately, current training structures create impediments for practising and aspiring rural physicians to obtain training and certification in these special skills.

To begin to simply level off this decline in rural physician numbers, the output of training programs in the production of rural physicians would have to increase by 15% of all Ontario family practice graduates (i.e. at least 35 additional physicians/year). When one factors in the existing shortfall of rural physicians, practice patterns of newer physicians, and demographic changes in rural Ontario, it is clear that even such a significant change would be the bare minimum, and that any delay in implementing a comprehensive and integrated package of recruitment and retention measures will increase the enormity of the problem.

B. RURAL AND NORTHERN POPULATION

AND GEOGRAPHY

Ontario has a population of 10,753,573, with a geographic area of 1.1 million square kilometers. Just over 23% of Ontario's population lives in towns less than 10,000 people.

The population and geography of Ontario's different regions (Northeast, Northwest, East, Central East, Central West, and Southwest: See Maps & Tables, Appendix 2-18) are very different. In most of Northern Ontario the population is very sparse and separated by enormous distances. Distance, often complicated by winter driving or flying conditions, provides a major access barrier for the Northern population. In addition, most of Ontario's First Nations' population resides in Northern Ontario and generally has poor health outcome measures. Even the large cities in Northern Ontario are small compared to those in Southern Ontario.

Although Southern Ontario does not involve the same distances as exist in the North, nonetheless, some parts of Southern Ontario are very rural (whatever the specific definition, it is fair to say that approximately 40% of the population of Southwestern Ontario can be considered rural).

Compared with their urban counterparts, rural people are more likely to be employed in high-risk occupations including mining, farming, fishing or logging. Educational status and family income are lower and the average age is higher. Illness and injury patterns, and social context and support are also considerably different.

Like people everywhere, Rural and Northern Ontarians need access to primary care services by family physicians, emergency medical care within a reasonable time and distance, local low risk maternity/birth services, general specialist care in mid-sized regional communities and system-wide access to tertiary and quaternary care provided in large urban centres.

C. RURAL AND NORTHERN COMMUNITY NEEDS

FOR PRIMARY AND HOSPITAL CARE

To provide reasonable access to quality care, an equitable distribution of family physicians is needed. Even a uniform distribution of family physicians per population may underestimate the number of family physicians that are actually required in Rural and Northern areas. The fact is that many family physicians

in Rural and Northern areas are much more actively involved in hospital responsibilities than their urban counterparts, leaving less time for office-based primary care.

As well, many family physicians in Rural and Northern areas need to provide more complex office and hospital-based patient care than their urban counterparts, because of limited or distant access to specialist care. Furthermore, as noted above, in smaller communities, a critical mass of physicians is required in order to provide sustainable working conditions.

Turning to hospital-based primary care, it is important to recognize that, despite the current restructuring and consolidation of small hospital services, family physicians will continue to play a large in-hospital role in Rural and Northern areas. In most Rural and Northern Ontario communities, emergency and in-hospital care for patients with multiple trauma, myocardial infarction and a wide variety of minor and major conditions is provided mainly by family physicians. In these small active hospitals family physicians deliver babies and provide anaesthesia services. There will remain, particularly at B-level hospitals⁸ a critical need to maintain a sufficient number of family physicians with advanced skills, such as anaesthesia, surgery and advanced obstetrical skills, to ensure availability of these crucial medical services.

Even at C-level hospitals⁹, particularly in Northern Ontario, family physicians will continue to need to play a major role in providing many services which in Southern urban centres are provided largely by specialists.

Clearly, by any measures, more family physicians are needed for Rural and Northern Ontario. In many Northern Ontario communities, including the larger cities, it is still difficult for people to find a family doctor. In Southwestern Ontario the problem continues to grow, with almost every community outside of London needing significantly more family physicians¹⁰. Much of Central West Ontario outside of Hamilton-Wentworth is similarly underserved as are some communities in East and Central East.

As to hospital based services, there is a developing shortage of family physicians doing emergency department work, anaesthesia and attending births. Licensing changes requiring certification of family medicine or specialty training prior to licensure contributed to the small hospital emergency department medical care shortage that developed earlier this decade. This became a crisis in some rural communities, prior to the move to sessional payments following the recommendations of the 1995 Scott Report¹¹, which did stabilize the number of physicians providing emergency medical services in small rural hospitals. Nonetheless, in some communities in Southwestern Ontario, there is a renewed crisis, partly as a result of the loss of the ability for licensed residents to practise outside of their training programs at small hospital emergency departments.

Between 1988 and 1995, the number of hospitals providing obstetrical services declined, and the number of family physicians providing these services dropped 17%. Similarly over the same period, the number of GP anaesthetists dropped 24%, reducing the availability of anaesthesia services, particularly outside of regular hours.¹² There is a clear need for more family physicians to attend births and to provide GP anaesthesia and do emergency department shifts in small, active hospitals (B-level hospitals) throughout Rural and Northern Ontario. As well there is a need for more family physicians to attend births and do emergency department shifts in both B-level and C-level hospitals in larger communities in Rural and Northern Ontario.

D. RURAL AND NORTHERN NEEDS FOR SPECIALISTS

The general surgeon has been the dominant specialist in most small hospitals, providing a broad spectrum of surgical care from trauma to caesarean sections. Large B level hospitals require general internal medicine specialists and at least visiting service from radiologists and psychiatrist services. C level facilities, functioning as regional

support hospitals require a complement of general specialists including internal medicine, obs/gyn, paediatrics and psychiatry. Depending on need, they may also require subspecialty services such as otolaryngology, orthopaedics, cardiology and gastroenterology. An integrated program that facilitates transfer of more difficult cases to a higher level of care and provides information and clinical support to the lower levels of care is urgently needed. Both B and C level Rural and Northern hospitals continue to have difficulty recruiting adequate numbers of specialists. This situation is made worse by the advancing age of the present cohort of rural general surgeons. Psychiatry has always been and remains one of the most maldistributed of all specialty fields in Ontario.¹³

III SOLUTIONS

We turn now to the core of this Blueprint, our recommendations for program changes and new programs across the entire medical life cycle continuum. Section A focuses on the full range of measures needed in medical education for rural practice, from the period before medical school through to continuing medical education and retraining opportunities for established physicians. Section B turns to a variety of key reforms needed to recruit, and more importantly support and retain, both new and established physicians in rural practice.

A. MEDICAL EDUCATION

The uniqueness of rural practice¹⁴, together with the need for rural physicians, highlights the critical importance of education for rural practice. Education for rural medical practice is a continuum that starts before medical school and extends to life-long practice-based continuing medical education. This process needs to be developed and supported at each stage as part of the goal of providing high quality rural medical care.¹⁵

Sustainability of human resources for rural medical practice will be achieved when medicine attracts a sufficient number of individuals who:

- a. find rural lifestyles enjoyable and desirable and
- b. find rural medical practice exciting and fulfilling
- c. find training for rural medical practice available, appropriate and respected

1. Before Medical School: High School

While the literature is not conclusive, there is support for the proposition that early attempts to interest high school students in rural areas in a medical career can result in those individuals becoming rural physicians. There is also evidence that presentation of careers in rural health care as an attractive career option to high school students can have a positive impact¹⁶. As one participant noted, "the best fertilizer is a farmer's footprint".

Longstanding examples of successful programs include the Memorial University Med Quest Program, the University of Missouri-Kansas City School of Medicine talent-identification program (TIP) and the University of Alabama Biomedical Sciences Prep Program (Bioprep). A similar program may well be successful in attracting non-rural students to rural practice.¹⁷

Several universities and organizations have also developed video packages and other counseling aids that can be presented at rural high schools to encourage students to pursue higher education and medical education in particular.

Recommendations:

1. A rural recruitment program should be organized and supported by universities and the Provincial Government. This may be best achieved through high school visits by community physicians and by residents/ medical students who are themselves training on rural rotations or in rural programs.
2. There should be a university based health science week/day to which interested rural high school students would be invited (not unlike a basketball or hockey camp).
3. Local school boards should direct career counselors to encourage rural students to develop an interest in medicine as a career, and proactively identify students with an aptitude for or potential interest in medicine. Some innovative medical school recruitment programs (for example, the Med Quest Program in Newfoundland) place particular emphasis on identifying potential medical students from rural areas and assist them in applying and preparing for medical school.
4. High school work study placements and summer student placements in rural hospitals with rural physicians should be encouraged, and made available to interested high school students and encouraged.

2. Pre-Medical Undergraduate Rural Exposure to Rural Medical Experiences

Currently, many undergraduate university students with an interest in medicine participate in volunteer work through local tertiary care hospitals and/or research facilities. For the vast majority of undergraduate university students, a rural medical exposure is not feasible for financial and practical considerations. Funded opportunities for rural undergraduate exposure should be made available to students in all universities in the province, including those without medical schools.

Recommendations:

1. A one week rural medical experience should be developed for interested undergraduate (pre-medical) university students to enable them to have exposure to rural medical practice and the rural community, co-ordinated through rural hospitals. Within this program, there should be an opportunity for identifying and mentoring promising students.
 2. A limited number of advanced studentships of one to four months duration would provide further experience for rural stream students. These experiences could involve research or participatory observation (as is currently available for high school co-op work study placements).
 3. Such programs should be promoted by rural medical clubs at the universities with medical faculties, the Offices of Rural Medicine (see Section 4, recommendation 1) in each medical school, and by Community Development Officers (see Section 25) in all regions. In this respect, there is tremendous energy in the undergraduate segment of the student body making application to medicine, so that there may be merit in involving this group in promoting and maintaining such a program.
 4. Government needs to make funding available for transportation and accommodation of students, and for participating preceptors. In addition, community support infrastructure can be developed with the aid of existing community organizations, such as OMAFRA (Ontario Ministry of Agriculture and Rural Affairs), WRED (Women for Rural Economic Development), ROMA (Rural Ontario Municipal Association) and OFA (Ontario Federation of Agriculture).
3. Medical School Admission Committees Medical schools select the best candidates available to attend and succeed in those institutions. Qualifiers other than academic standing are currently included in the selection process.

Having rural roots is a complicated and poorly understood predictor, yet there is some clear documentation of the increased likelihood of students of rural background to choose rural practice.¹⁸ As one participant observed, banana trees don't grow in cold weather.

There would also appear to be no intrinsic association between academic standing and probability of rural practice (and perhaps being a good generalist).

As the Edinburgh Declaration of the World Rural Health Conference stated, medical school admission procedures should be based on institutional mission and capacity, and national health work force target. The open entry system is obsolete.

There is evidence¹⁹ that the development of decentralized medical schools, or at least a separate admissions/application stream for Rural and Northern training, can be instrumental in admitting medical students more likely to establish Rural and Northern practices.

Recommendations:

1. Admission committees should make it known that they intend to admit more students who are more likely to serve in rural communities. Admission should be based both on academic and other criteria relevant to future success as a physician, including likelihood of serving underserved populations.

As well, consideration must be given to implementing and even requiring separate rural admission streams.

2. Medical student admission committees/interviews should include at least one rural clinician. The participation of rural physicians in this process must be adequately funded.

3. Research should be undertaken and analyzed to determine other effective admission level strategies.

4. The extent to which admissions standards encourage/facilitate the admission of students with a rural background should be included as part of the medical school accreditation process.

4. Undergraduate Core Rural Curriculum Component

*You can take the boy out of the country....but once the boy becomes a doctor how do you get him back there again?*²⁰

Whether or not a medical student will eventually practise urban subspecialty care or rural primary care, there are benefits of exposure to rural medical practice. Urban sub-specialists need to understand the pressures and work realities of rural practice when treating patients referred to them by rural colleagues or giving telemedicine advice. Similarly, urban primary care providers can better interact with their rural colleagues if there is shared awareness of the realities of rural medical practice. Even more important, the generalist nature of rural medical practice with less reliance on specialists and high technology investigation and intervention is a desirable influence on urban practitioners.

Rural medical practice should be viewed as a unique discipline, warranting specific training and exposure for all medical students. Many medical schools provide some counterbalance to the predominantly urban experience by providing a short rural practice experience, usually during the final family medicine year, or community medicine clerkship. Students generally rate these rural rotations as a positive learning experience. Even for students who do not choose rural practice as a career, rural rotations can provide insights into the difficulties faced by rural patients and rural physicians and may help them be more effective in their role as specialists or consultant urban physicians.

A desire for rural practice is the most important factor in the choice of rural practice as a career.²¹ A positive rural practice experience during medical school positively influences students' attitudes towards rural practice.²² Often, however, this rural preceptorship experience may be too little and too late, occurring at a time when many students have already formulated their career choices based on their predominantly urban experiences and role models in medical school. As a result, it is more appropriate that rural practice experience be spread throughout medical school, ideally with a component in every year. Interest and desire for rural practice can also be encouraged at the universities through rural practice clubs and mentoring involving rural physicians.

There are streamed models and core models for rural exposure. Rural training streams are of particular benefit to students who have shown an early interest or commitment to rural practice as a career. Rural streams that are currently offered by some medical schools usually emphasize early and extensive clinical experience in rural settings combined with rural-oriented curriculum. These programs tend to have a high percentage of graduates who go on to rural practice.

At the present time, Ontario does not have a rural stream. However, the implementation of special rural streams would not detract from the necessity to provide all students with an appropriately integrated rural medicine curriculum and positive rural experiences that will interest and equip more students for rural practice and provide others with the appropriate understanding and knowledge to provide regional support for rural physicians and their patients.

Successfully developing and implementing a rural curriculum requires the development and input of rural faculty, combined with central faculty and management support. Integrating rural medicine into medical school goals, mission statements and curricula has been a major factor in the success of some medical schools in producing significant numbers of appropriately trained physicians for rural practice.²³

In the United States, 12 out of 126 medical schools produce 25% of the nation's practising rural physicians.²⁴ The medical schools that are the most successful in producing physicians who will practise in rural areas are those with co-ordinated rural-oriented medical education programs that provide early and extensive rural experience combined with positive general medical school support for rural practice.²⁵ While it is difficult to isolate and measure the effects of the rural practice experience in these programs, their overall success is due to a combination of integrated factors, often including selective admission, a rural-oriented curriculum, supportive central faculty and extensive involvement of a rural practice faculty.

Although rural students are more likely to enter rural practice than urban students, urban students are still the significant majority in most medical schools. Given these numbers, a significant portion of future rural physicians will need to come from urban students. The number of students with both the desire and appropriate education for rural practice can be raised by increasing the rural practice experience and focus of medical schools.

The most successful programs for producing physicians who will go into rural practice are co-ordinated programs that provide a wide variety of rural practice initiatives and it is often difficult to separate the effects of the different components. They include teaching staff who work every day with physicians with patients in little towns and rural settings and hold rural physicians in high regard and honestly support students when interested in rural medicine.²⁶

As well, the importance of the dean in setting the tone of the medical school cannot be understated. When someone in the dean's office keeps hammering away on something, it is amazing how some of the most resistant faculty suddenly take for granted that it is going to change.²⁷

Recommendations:

1. An Office of Rural Medicine should be established in each Faculty of Medicine, whose function would include co-ordinating medical school rural education activities.
2. Learning relevant to rural medical practice needs to be integrated into undergraduate medical curriculums in Ontario's medical schools.
3. Practising rural physicians must be included on medical school faculties, and provide input into curriculum design and implementation. This inclusion of rural faculty needs to be developed and fostered through adequate funding and other supports.
4. All students should have a rural clerkship experience to consolidate their learning in a low tech, high self-reliance environment.
5. A continuous rural stream should exist in at least one medical faculty and be developed in others if shown to be successful. This would provide constant rural contact as well as an important counterbalance to the tendency of undergraduate medical students being subtly dissuaded from developing an interest in rural practice.
6. Where appropriate, participating students with spouses/significant others should have an opportunity to integrate them into the rural experience, rather than be separated from them by the experience.²⁸

5. Undergraduate Medical Student Electives

Increasingly, medical students are requesting rural elective opportunities, but they encounter resistance and lack of infrastructure, funding and support from their medical schools, for such basic items as accommodation and travel. The evidence is clear that the earlier the exposure to rural practice and the longer the duration of that exposure, the more likely the student will adopt a rural style of practice.²⁹ As a result, there must be opportunities for increased rural electives, as well as counseling regarding suitability of electives for rural practice.

Opportunities for regular block electives can meet individual needs as they do now, but there should also be the opportunity for rural stream students to have long (summer or even up to seven months) electives in the rural setting, as in the Minnesota Rural Medical Associate Program.³⁰ Electives should include both primary care placements, as well as generalist specialist placements outside Academic Health Science Centres (AHSC).

Recommendations:

1. Medical schools must ensure that rural faculty have the resources they need to provide counseling regarding suitable electives for rural practice with an emphasis on procedural and acute care skills.
2. Four to six week block electives should be offered to all medical students. Opportunities need to be cultivated community by community to maximize the number of placement opportunities.
3. Additional funding must be provided for electives. The funding should be learner-centred (i.e. flow to students), thereby allowing for greater student choice and flexibility.
4. In addition to electives, a rural training stream, (which could include a Rural Physician Associate Program such as the Minnesota Program) should be examined and piloted in Ontario. This could include a six to nine month placement in a rural community.
5. Even if electives are made more widely available, early career path selection needs to be de-emphasized for medical students, since medical students tend to make the safer choice of steering

away from training for rural practice if forced to choose too early. In this respect, serious consideration should be given to bringing back the rotating internship year, which gave students the opportunity to make later, and thus more informed and mature, career choices.

6. Barriers to medical students undertaking electives should be removed. These not only include lack of funding but also elective fees charged by medical schools.

6. Undergraduate Return of Service Agreements

Increasing exposure to rural practice opportunities for medical students will lead to increasing interest in practice in rural areas. Voluntary return of service agreements can encourage such interest and help medical students with increasingly burdensome medical education costs.

There is reason to believe that students from rural backgrounds and/or who are interested in rural practice as a career choice may be attracted to scholarships and loans in exchange for return of service to rural areas.

Recent studies in the United States indicate that physicians forced to enter rural practice because of mandated return of service obligations are less likely to be satisfied or stay in rural practice than their rural colleagues.³¹ Clearly, the more important factors in successfully retaining physicians in rural practice are programs and supports making rural practice sustainable. Thus, implementing more extensive voluntary return of service programs must not be used as an excuse to do nothing else, and to replace other more critically needed and required initiatives.

Ontario's previous undergraduate medical student Return of Service Bursary Program was canceled in 1997. However, Saskatchewan has a highly successful Undergraduate Medical Student Bursary Program. In large measure, this likely reflects the significant amount of funding available to individuals under the Saskatchewan program.

Return of service has increasingly been discussed in response to the rapidly rising tuition fees in medical school, and the resulting economic hardship on students. Student bursaries and loans are not keeping up with these changes. The situation is made even worse by the implementation of tuition fees at the residency level. Students in rural areas are one of the groups most affected by these changes, because they will face higher living and travel costs throughout their training, and generally

tend to have access to fewer economic resources. In this respect, unlike medical students from urban areas, those from rural areas cannot reside at home during their studies. They have always absorbed this additional cost, which is believed to have discouraged some qualified rural students from applying for medical studies. Even if loan programs are enhanced, potential medical students from rural areas will face an enormous psychological barrier in assuming such a large debt load.

The spiraling of tuition fees particularly threatens the access of women from rural areas as they are more likely to practise flexible hours and take leaves of absence from their practice. Such a large debt load may perhaps discourage potential women medical students from rural areas from considering a medical career.³²

Recommendations:

1. Undergraduate voluntary return of service agreements should be re-introduced and expanded.
2. Return of service commitments should not be tied to particular communities, but rather should be sufficiently flexible to allow for physician and community choice.

3. Voluntary return of service programs should not be limited to undergraduate medical students, but should be extended to residents. Residents are closer to completing their training, have a clearer idea of their practice goals, and may be even more interested in programs which offer them the opportunity to reduce their considerable debts.

4. Return of service arrangements must be voluntary. Coercive measures result in recruitment of physicians who are only looking to leave the community and do nothing to enhance retention.

5. Relief from the imposition of excessive tuition fees on medical students,

and residents, should not be used as a tool to coerce individuals to agree to practise in rural communities. Likewise, return of service should not be used as a requirement for admission to medical school.

7. Postgraduate Rural Medical Training

“Teaching hospitals are run by physicians who have chosen a small area of medicine in which, with the aid of expensive technology, they have become expert. How can physicians be expected to feel competent or wish to practise in country areas hundreds of kilometres away from such technology? The country preceptor has to show the student the satisfaction and fun of rural practice and how it is possible to practise high quality but cost effective medicine without....a CT scanner.”³³

Traditionally, the residency training experience primarily takes place in urban-based teaching hospitals with medical teachers who have never practised in a rural setting and have little understanding of the joys and challenges of rural practice. Even for students from a rural background who tend to favour rural practice as a career choice upon entering medical school, this desire may fade as a result of the prolonged social, cultural and medical urban experience. As well, urban based training programs can create significant inertia and are unlikely to effectively decentralize without strong motivation (probably external) to do so.

Numerous models for postgraduate rural medical training have been tried.

A positive impact on rural recruitment and retention seems related to;

a) duration of the rural component of training,

b) preparedness for rural practice.

Decentralized models for postgraduate residency training seem more effective in placement of graduates in rural communities. On the national level the joint CFPC (College of Family Physicians of Canada) and SRPC Working Group on Family Practice Curriculum is currently examining rural training programs and developing recommendations for training in rural family practice. In Ontario, the Northern training programs (NOMP and NOMEK) have made progress in terms of location of practice following training, with graduates found predominantly in Rural and Northern areas.³⁴ However, while programs such as SWORM (Southwestern Ontario Rural Medicine) are a hopeful beginning, the fact remains that Southern Ontario residency programs have not yet sufficiently addressed the need for residency training in rural communities.

Recommendations:

1. Training with significant rural content and exposure, must be offered by all family medicine training programs, made available to any interested family medicine residents, and strongly encouraged for all family medicine residents. While the minimum period of training should be one month, longer periods of training are less disruptive and more effective.

2. For aspiring rural physicians, there must be a separate rural stream, with a rural core component of no less than four months of rural family medicine plus two months training in each of emergency medicine, obstetrics and ICU/anaesthesia. The B.C. experience of total rural immersion provides one successful model.

3. While some existing funding could be redistributed to rural training routes and programs, new funding is required to remove barriers (such as transportation and accommodation costs), to develop sites, and to pay the costs of faculty support including preceptor stipends.

4. The number of residents training in a rural training stream should be substantially increased. In the case of family medicine training positions, Graham Scott's recommendation that 30% of training positions be dedicated to rural streaming³⁵ should be implemented as the absolute minimum target.

5. There is a need for appropriate, dedicated rural faculty support and development (see Section 8).

6. Specialist based training programs, initially in the priority areas of general surgery, obstetrics, paediatrics, internal medicine and psychiatry, should be established/piloted in mid-sized communities (of 20 to 25 thousand). In this respect, the multi-specialty community training network, recently established in Southwestern Ontario, provides a workable model.³⁶

7. Urban-based specialty training programs must include opportunities for training outside Academic Health Science Centres, the length of which may vary depending upon the program involved.

8. Enhanced flexibility for residents to change or augment training programs is needed, particularly when requested by candidates committed to rural practice.

8. Rural Physician Faculty Appointments/Teaching Activities

Increasing rural education opportunities for medical and pre-medical trainees at all levels will increase the number of rural clinicians needed for rural medical education. Rural clinician support for existing rural education programs is an indicator of the enthusiasm, often poorly rewarded, for teaching. Rural physicians are effective teachers, and rural doctor-preceptors are more likely to stay in rural areas than their non-preceptor counterparts.³⁷

Faculty appointments for rural clinicians should be facilitated and encouraged, in order to provide concrete recognition for their work. Faculty appointments may contribute to job satisfaction and may have an impact on long-term sustainability.

Funding issues are also an important concern, since rural faculty need to be compensated for clinical work lost as a result of time spent in various teaching functions.

Increasing the number of rural physician/teachers will require medical schools to increase their commitment to faculty development. This includes providing appropriate academic faculty positions for rural doctor/teachers, with adequate faculty resources, developing practice arrangements suitable for teaching rural general practice, and involving rural physicians/teachers in training, program policy and curriculum development.

With these general requirements in mind, the more specific recommendations in relation to rural faculty appointments and activities are as follows.

Recommendations:

1. Ontario's five medical schools should actively work to appoint rural clinicians to faculty positions.

2. Opportunities for rural faculty to work in both Academic Health Science Centres and in their rural communities should create a viable academic career path that values and rewards practitioners/teachers of rural medicine.

3. Information services and travel support must be provided to rural faculty.

4. In order to sustain the teaching function in qualifying rural communities, an additional physician must be added to the community complement which the Ministry of Health is prepared to fund, through alternate payment plans or other Ministry programs. This will allow both practice and education to co-exist effectively in these communities.

5. Rural faculty must be supported and encouraged to become involved in supporting their surrounding communities, through a variety of activities, such as outreach, education, shared coverage, and locums.

6. A core of AHSC faculty should be encouraged to serve as a locum pool to foster rural liaison between the Academic Health Science Centre and the rural community. This would allow a high degree of cross education between the faculty and practising physicians in the rural community.

7. Specialists involved in training physicians for advanced skills, outside the formal Royal College certification process, need academic recognition and support from their university based peers.

9. Training of Rural Teachers

Formalizing the role of rural physicians as teachers requires an expanded “teach the rural teacher” program. Wide experience has shown that rural physicians with an interest in teaching are naturally good teachers. The role of any training program for training of rural physicians to become effective teachers must seek to build on that, without restricting it to the urban family practice model.

Just as rural physicians learn best from other rural physicians, rural teachers will learn best from other rural teachers. Training for rural clinical teachers should be held at rural regional hubs. These can be facilitated by a Regional Director of Rural Training (as recommended below), with input from the CFPC Section of Teachers, the SRPC Education Committee and appropriate university resources.

Participation in rural clinical teacher training should be an important consideration in retaining faculty status. The opportunity to qualify for teaching should be available to interested experienced rural clinicians, irrespective of CFPC certification.

It is to be expected that rural communities and individual clinicians will move in and out of the teaching stream. This sharing of the teaching function will enrich the life of many clinicians rather than only a few, and contribute to more communities becoming local centres of excellence rather than centres of burned out rural physicians.

Recommendations:

1. Implement a funded faculty position (the Regional Director of Rural Training, for further discussion see also Section 25, recommendation 2) in each Ontario medical school, who would be responsible for ensuring appropriate faculty development of rural teachers.

2. There needs to be increased funding and support for community physicians providing special skills training with a view to enhancing their teaching skills and resources.

3. There needs to be increased involvement and commitment by medical

schools and their faculties, and by supporting organizations such as the College of Family Physicians of Canada (CFPC), the Royal College of Physicians and Surgeons of Canada (RCPSC) and its representative specialty organizations, and the SRPC, to training family physicians in advanced skills, in the areas of surgery, obstetrics, anaesthesia and psychiatry.

4. Funding of rural practices needs to take into account the importance of, and need for, training rural physicians by rural physicians.³⁸

10. Advanced Skills Training for Residents and Practising Rural Physicians

It is well-recognized that providing care in rural settings requires a broader base of skills than in urban areas. Opportunities for this training have most often been accomplished satisfactorily in secondary rather than tertiary centres.

Postgraduate trainees and practising rural physicians (both generalist and specialist) need opportunities to acquire training in skills integral to rural practice. These include, among others, endoscopy, minor and advanced surgical skills (including caesarean section), anaesthesia, orthopaedics, internal medicine, trauma, radiology and mental health.

Recommendations:

1. Postgraduate training for rural practice should be flexible and include as much opportunity for advanced skills as possible, even within the two year FP envelope.

2. Programs for advanced skills training in FP anaesthesia, FP surgery and advanced FP obstetrics with caesarian section skills and psychiatry should be available in sufficient numbers to supply projected needs. They should be accessible to third year family medicine residents, and established physicians with a demonstrated commitment to rural practice. In principle, subject to availability of mentors and teaching opportunities, these skills could be acquired in a teaching centre, a regional hospital, a rural hospital or a combination of sites.

3. Length of Advanced Skills Training should be flexible with opportunities for skill maintenance readily available.

4. Advanced skills training needs to be competency based. Thus, applicants for training should be evaluated for previous training, existing skills and community resources and support. The proposed duration and scope of training should be sufficiently flexible to meet the needs of individual trainees, and communities.

5. Regional Directors of Rural Training should have some responsibility for the development and maintenance of these programs.

6. Sabbaticals at appropriate pay for qualified rural physicians need to be made available, and funded by government, for longer special skills training, i.e., surgery and anaesthesia.

7. An alternate pathway for skills should be made available within a regional centre or local community, providing for a horizontal training program

(i.e., without requiring commitment of an extended block period of time),

as has been piloted in rural B.C.

8. Advanced skills development should be accredited, evaluated and recognized by appropriate national and provincial organizations. Maintenance of competency programs should be a requirement of advanced skills training.

11. Re-entry Training Positions

The most recent OMA/Government Agreement provided for improved access for a limited number of physicians to undergo advanced skills training. This can allow practising rural family physicians to obtain training to expand their role (currently in GP anaesthesia, emergency medicine and care of the elderly), or to change their clinical direction and enter RCPSC training programs (with the current priority being in general surgery, obstetrics and gynaecology, internal medicine and psychiatry and anaesthesia). One year of return of service in rural communities is required for each year of training.

However, as presently structured, re-entry training is not providing special nor enhanced skills training for family physicians in Royal College specialty areas (i.e. GP surgery and anaesthesia) outside formal Royal College programs which are four to five years in duration.

One barrier to re-entry for established physicians is that they are paid only at the residency salary levels during their re-entry training. Some provinces, including Alberta, Saskatchewan and New Brunswick, have recognized this financial disincentive and provide additional compensation for re-entry positions. Physicians have also raised concerns that the time lines for applying for a re-entry position are too tight.