

FINAL DRAFT

**Improving Access to Needed
Medical Services
in
Rural and Remote Canadian
Communities:**

Recruitment and Retention Revisited

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Preamble

This discussion paper addresses the problem of improving access to medical services in rural and remote communities in Canada, and reviews policy options for addressing this

problem. It is written in a question-and-answer format appropriate for a wide general audience. The questions cover a range of topics including some of the history of the problem, approaches which have been used in Canada and elsewhere, assessments of these approaches, and the scope for further policy development in this area.

Our assignment was to revisit the analysis of geographic maldistribution of physicians in our 1991 report, *Toward Integrated Medical Resource Policies for Canada*, and to re-assess current policy options in this area, in the context of emerging access issues in rural and remote areas of the country. We draw on a comprehensive recent review of these issues contained in a just-completed companion report by Barer, Wood and Schneider, *Toward Improved Access to Medical Services for Relatively Undeserved Populations: Canadian Approaches, Foreign Lessons* (available from Health Canada). Among other things, that report contains for each province and territory detailed descriptions of policies designed to address access in rural and remote areas.

Although we are aware that concerns about access to care are surfacing in some urban areas, an analysis of these situations was not our assigned task. Nevertheless, some of the policy directions we identify in section III of this paper are relevant to the urban context as well.

Given the compressed time frame, this discussion paper is not intended to be a comprehensive research report. Rather it is an attempt to integrate the history of the problem and the new understandings revealed by experience since 1991 into an updated analysis of policy options for improving access in rural and remote areas.

The discussion paper begins with our assessment of why improving access to needed medical services in rural and remote areas is such a persistent policy problem. We then briefly review our 1991 analysis. In section II we address a series of questions, each of which represents a commonly offered policy solution in this area, based on what are widely understood to be the major policy levers. We begin with the question of whether continuing as we have been would be a productive policy approach (we think it would not be). Readers will find that our assessment of accumulated policy experience leads us to conclude that most of the commonly advanced policy ‘solutions’ hold limited potential.

We shift gears in section III, where we discuss three general policy directions that, in our view, continue to hold considerable unexplored potential. Our intent is to stimulate discussion and further consideration of these directions, because it seems clear that real progress will require real change.

Section I: INTRODUCTION AND BACKGROUND

Why does the problem persist?

Canadians living in rural and remote areas of the country have always found physician services less accessible than their city-dwelling counterparts. The problem is as old as written commentary on physician resource issues in this country. For the most part, the reasons are no mystery – there is a fundamental mismatch between the needs of rural and remote communities on the one hand, and the needs and choices of (and influences on) those who become physicians on the other. There are many communities across this country that are simply too small to support a general practitioner, or that are large enough to support one, but too small to support two or three, let alone the full range of specialists found in large urban centres. For their part, most Canadians who are accepted into the medical schools across the country have grown up in urban settings; the bulk of their medical training occurs in urban settings; that training takes place largely in tertiary hospitals which are only found in urban settings; much of the training is provided by physician-educators who work in urban settings; there are (even in per capita terms) more practice opportunities in urban settings; access to specialist colleagues and other complementary treatment and diagnostic resources are more plentiful in urban settings; hours of work are more likely to be ‘regular’ in urban settings and, in particular, call schedules are less onerous; and there are many more social, educational, recreational, employment and cultural opportunities for physicians and their families in urban settings. One might be led to wonder why any physicians would choose to practice elsewhere. Historically, relatively few have.

But some do. Indeed, some physicians seek out rural and remote opportunities, because they cherish the quality of life in smaller communities, or because they seek the unique challenges of practice in such settings. For them, these rewards outweigh the problems. Providing medical care in rural and remote areas can be one of the most fulfilling, exciting, and challenging types of work that a physician could imagine. And despite the inevitable personal and professional challenges faced by their physicians, hundreds of thousands of Canadians across the country have been well-served by these dedicated professionals.

Nevertheless, those who explicitly seek out rural and remote practice opportunities have

historically been the exception, rather than the rule, which brings us back to why the problem persists. Looking at the reasons in more detail, we would suggest that they are of three types. A first cluster of reasons are largely endemic to the setting, and by their nature particularly resistant to policy intervention. It is not possible for those responsible for physician resources policy in this country to imbue small towns with big city ‘perks’ (and, indeed, most of those living in such small towns might be aghast that anyone would even suggest such a thing). For most physicians, big (or at least moderate-sized) cities are where they would prefer to live and work, for both professional and personal reasons. Those at the stage where they are facing decisions about where to practice rank personal factors at or near the top of the influences on those decisions, time and time again. Larger concentrations of population create a greater range of educational, religious, cultural and recreational opportunities for families, more possibility to create social networks of similarly educated friends and colleagues, and a greater range of (often professional) work opportunities for a spouse.

A second cluster of reasons for the persistent problem of physician service access for rural/remote populations arises out of the circumstances of practice. At least one of these so-called “professional practice considerations” is, in the final analysis, another “personal” factor -- the issue of lack of relief, which leads to high stress and burn-out. Everyone is aware of situations in which physicians are on-call one night in two or three, or have difficulty taking holidays from rural communities, or even have to be on-call continuously in one-physician towns. Even if on most occasions the on-call times are quiet, times when one is on-call are qualitatively different than those when one is not. This may ‘go with the territory’ of rural/remote practice, but it is a key consideration for physicians deciding whether to make that choice.

Other professional considerations include relatively less accessible professional support (e.g. colleagues with whom one might discuss a troublesome case or with whom one can perform general surgery, or specialists to whom one can refer patients) and complementary facilities (e.g. hospital beds, diagnostic equipment and supplies), and the flexibility, convenience and funding to take advantage of continuing education opportunities.

A third key reason for the persistence of the problem in Canada is that there have always, and almost everywhere, been urban alternatives. Although the availability of physicians is considerably greater (per capita) in most urban settings across the country than in most rural/remote settings, even for general/family practitioners, new entrants have always had an urban alternative (if not in a particular urban location, or in a particular province or territory, then in others), and most who have made that choice have managed to establish busy and successful practices. Why, in such circumstances, would we expect any but the few who are committed to the rural way of life (who will often have come from that background as children) to make that choice?

There is a fourth reason that has nothing to do with the nature of the settings or personal or professional circumstances and considerations. It arises from policy decisions from the recent past. Many rural and remote areas have sufficient population bases to support only family practitioners. As a result, the vast majority of physicians in these communities have always been, will continue to be, and indeed should be, general/family practitioners.

But recent licensing and training decisions appear to have reduced the probability that any particular physician emerging from the Canadian undergraduate and residency training programs will go on to family practice.

In the early 1990s decisions taken by provincial/territorial licensing authorities in line with positions taken by the Federation of Medical Licensing Authorities and the College of Family Physicians of Canada (CFPC) led to the “rotating internship” being replaced by a two-stream choice: either a specialty residency leading to Royal College certification, or a two-year family practice residency leading to CFPC certification. This has had three effects. First, for those who would, under the old model, have completed a rotating internship and gone on to family practice, a second year of training is now required. But it appears that few internal (within academic health centre) adjustments were made to the mix of residency positions, although reallocations were recommended by the National Coordinating Committee on Postgraduate Medical Training. The effect has been to channel fewer residents overall into the family practice stream.

Second, it is alleged by some that those emerging from rotating internships had received a wider range of exposures and experiences, and so were in fact better equipped to handle the breadth of clinical problems faced by rural/remote primary care practitioners, than are many of those emerging from some of the current two-year family practice residencies.

Third, the elimination of the rotating internship has tended to force the hand of physicians regarding career specialty decisions somewhat earlier than previously. While switching specialties during training, and re-entry into specialty training, are certainly possible and do occur, the current system is perceived to be relatively inhospitable to changing one’s mind. For example, a young MD who under the old system might have contemplated general practice for a number of years before finally deciding which specialty to enter (and who might possibly have chosen a rural or remote area in which to do that family practice), now faces a much more restrictive environment; if he or she has any thoughts about a specialty practice, the choice is best made early – rural/remote areas may be losing out on those early years of family practice.

One could argue about matters of relative competency, or about who is to blame for the reduced opportunities to train in family practice. Our intent here is not to point fingers, but only to point out the current realities, which seem to be fewer family practice-trained Canadian graduates, with (at least in some situations) less confidence and competence of the types required for rural and remote practice. This can only add to the difficulties of rural/remote communities.

Having said all that, the effect of the policy-based reasons for the persistence of the problem may be quantitatively relatively small. Prior to the elimination of the rotating internship, about 900 new Canadian-trained physicians were entering general practice. With the advent of the family practice two year residency requirement, it appears that

about 700 new Canadian-trained physicians now enter general practice annually. On average, about 15-20% of new family practitioners establish practices in rural or remote areas each year. Thus, although the 'graduating' complement has fallen by about 200, one would expect the reduction in those likely to take up rural or remote practice opportunities to have declined by about 30-40 per year, for the country as a whole.

Is this persistent problem uniquely Canadian?

The problems associated with ensuring reasonably equitable access to physician services, irrespective of where one lives, are found virtually everywhere in the developed world. Indeed, it is only in geographically compact, relatively densely populated countries such as Switzerland, Belgium and Israel, that one is unlikely to see physician distribution among the top few health care policy issues.

In countries such as Canada, Australia, France, Germany and New Zealand, which vary dramatically in size and population density, issues of appropriate access to physician services persist, particularly in the more remote areas. They are found across the full spectrum of health care financing arrangements, from the United States to Sweden. This point, perhaps more than any other, reinforces the complex and thorny nature of the issues. In all of these countries, the geographic distribution of physicians is a policy preoccupation. This suggests rather clearly that one will not find a magic bullet solution hidden in any particular choice of financing health care, purchasing services, or paying or training providers. Despite the fact that the problems are so widespread, a relatively small set of generic policy approaches has emerged internationally. None has completely eradicated the problem. But even within this limited menu, Canadian policy-makers have given insufficient attention to some potentially fruitful avenues.

What did we say about this problem in our 1991 report?

In 1991, we synthesized the literature to date on this subject, and performed new analyses for the report *Toward Integrated Medical Resource Policies for Canada*. That report analyzed problems and policy options in a dozen specific areas of physician resource policy, including the current one, and created an analytic framework for future policy development. “Geographic maldistribution of physicians” was identified as a “first tier” problem in the report, largely because it was labeled as a major problem by almost all of the over 70 people (involved in a variety of ways with the physician resource sector) that we interviewed. The problem of geographic maldistribution was shown to be linked with several other problem areas, including graduates of foreign medical schools, residency training and specialty certification, the role of fee-for-service remuneration, medical school curricula, licensure and regulation, and global expenditure control policy. Indeed, one of the over-arching themes of the report was the need to recognize the complex policy interactions in the physician resources sector and to develop co-ordinated (across both jurisdictions and stakeholders) “policy packages.”

The report summarized the basic causes as follows:

1. Individual practitioner decisions are driven by professional incentives and personal lifestyle factors which strongly favour concentration in urban practice settings.
2. The selection of students by medical schools takes inadequate account of the relative need for rural physicians.
3. Exposures and influences during training encourage urban practice.

It also noted that at the same time as some Canadians in remote or rural areas did not have timely and convenient access to physician services, some regions had many more physicians than were required to meet local needs.

The policy package which was recommended included:

- increased use of non-physician personnel working with regional physician consultants
- new training programs for these non-physician personnel
- improving science programmes and career counselling in rural area high schools
- reserving medical school places for qualified applicants willing to commit to rural practice
- revising medical school admissions criteria
- enhancing rural exposure in both undergraduate and postgraduate MD training
- developing new residency programmes to prepare rural regional consultants
- introducing or increasing financial incentives of various types
- providing clinical decision-making support networks and regular relief
- providing amenity packages that included benefits for spouses and children
- encouraging alternative remuneration methods.

It is worth noting that there was almost universal agreement among interviewees and analysts that the problem of geographic maldistribution was the most difficult to solve of all the physician resource policy problems identified, and that no optimal “solution” was likely possible. What was possible was a concerted and sustained management strategy to reduce the problem.

The report stressed other themes relevant to the problem of access to services in rural and remote areas. First, in addition to co-ordinated policy packages, policies had to address aspects of the recruitment and retention problem at all stages of the medical career life-cycle, from early high school education through to retirement. Second, inter-provincial/territorial co-ordination of policy was badly needed. Third, more attention needed to be paid to sensitive but effective ways of resolving the tensions created by the Canadian model of physicians as “private participants in a public enterprise”, especially when the decisions of individual physicians, their professional associations and their training and licensure institutions fall short of achieving important public policy objectives such as appropriate access to medical services for all Canadians.

Since 1991 there have been a number of relevant research studies, much policy commentary, and several important reports by organizations involved in what has become an increasingly politicized issue. This material has been recently reviewed for the Health Canada report, *Toward Improved Access to Medical Services for Relatively Underserved Populations*, and is incorporated in the questions and answers in section II below.

Section II: COMMONLY OFFERED POLICY SOLUTIONS

Why not continue to carry on as we have been?

The answer appears simple. Business as usual will almost certainly continue to guarantee “results as usual” -- there is no obvious reason that we will not continue to have the problems we have.

“Carrying on as we have been” means letting each jurisdiction in Canada continue to develop its own home-made strategies for improving rural/remote access. Five implications come immediately to mind. First, policies will continue to be crafted without regard to the potential side-effects that policies adopted in one jurisdiction may have on others, or, worse, with sights firmly fixed on the fact that making matters worse for other jurisdictions will make matters better ‘at home’. Second, individual jurisdictions are unlikely to take advantage of synergies available through the collaborative development of policies in this arena. Third, it virtually guarantees that problems beyond the control of any individual jurisdiction (but potentially amenable to collective actions) will remain problems. Fourth, it means continued duplication and lack of coordination, resulting in wasted resources and squandered opportunities. And fifth, potentially fruitful approaches that might work nationally will not be contemplated because they could have disastrous side effects if implemented in a single province or territory; as a result, we limit our range of potentially fruitful experimentation.

Provinces/territories have had decades to ‘solve’ the problems of rural/remote access, and have deployed an extensive array of approaches in the attempt. They have used various combinations and permutations of financial incentives, administrative/regulatory fiat, educational initiatives, contracting/direct service arrangements, and telemedicine initiatives. Yet we find the problems are more acute, or at least there is a perception across the country that they are, now than ever before.

If “carrying on as we have been” means “more of the same” in terms of outcomes, it will almost certainly mean “more of the same” on the dissatisfaction meter. The current situation satisfies no one. The affected populations in many areas appear unhappy about their access; the health care providers in many of these areas are complaining of being burnt out; provincial/territorial Ministries of Health face ongoing problems of budget predictability, and concerns about quality, accountability and continuity of care; and provincial/territorial politicians (those representing these regions, and also Ministers of Health) are buffeted daily by claims that they are not dealing effectively with these situations. It seems difficult to imagine a better way to guarantee a “lose, lose, lose” situation.

Would increasing medical school enrolment help solve the current problem?

Probably not. There is no reason to believe that simply increasing the number of Canadian graduating physicians will lead more – or even a significant number (about 10% of all Canadian medical school graduates currently choose remote or rural practice) – of them to practice in rural and remote areas. The personal and professional attractions

of cities like Toronto, Montreal and Vancouver, or other smaller urban areas often with good back-up and high technology facilities, are still there; as long as there are unfettered opportunities to make a “reasonable” living in those locations there is no reason to expect new graduates to change their location decisions.

In the medical field, “saturate the market” policies are likely to be relatively unsuccessful, because there often seems to be an unlimited amount that can be done to provide services to a population. (Although a considerable amount of evidence exists to suggest that present service patterns include a significant amount of utilization that is unnecessary or ineffective, it has proven extremely difficult to reduce or eliminate this component.) The case of British Columbia is instructive as an example of how it seems impossible to saturate a market, forcing enough physicians to locate elsewhere to achieve political peace. B.C. has ranked first among provinces and territories in the number of family physicians per capita since 1991 and second in the total number of physicians per capita since 1987. An oversupply of physicians in B.C. was recognized as early as 1979, and the 1996 physician supply plan negotiated between the B.C. Medical Association and the Ministry of Health showed a provincial surplus of 726 full-time-equivalent (fte) physicians on a base of 6,926 ftes, most of whom are located in the southwestern corner of the province. Yet even with this excess supply of physicians, the issue of rural service erupted politically this year.

Physician supply policies that rely on training so many physicians that they overflow the urban areas into rural and remote areas are a very expensive and inefficient way to steer physicians to those areas. Even observers in the United States, which has traditionally relied (relatively unsuccessfully) on this approach as a major component of its policy, have come to recognize this fact. In Canada, increasing enrolment to the extent necessary to have an impact on location decisions would, through its associated and predominant effect of increasing urban supply, greatly exacerbate the global expenditure control problem that every provincial/territorial ministry of health is already struggling with. Under provincial global caps on physician expenditures, medical associations and their members also have an interest in managing physician supply in order to maintain income levels. When physician supply or utilization of services increases beyond a certain point, proration of fees occurs. The strife that ensues within the medical profession and between the profession and government undermines the public’s confidence in both.

Nor does history support a supply expansion policy. For over thirty years prior to the early 1990’s, annual increases in the supply of physicians exceeded growth in the Canadian population, fueled in part by a 53% increase in first year Canadian medical school enrolment between 1967/68 and 1980/81. Therefore it is discouraging that the problem of rural and remote access, as perceived by all of the key parties – the public, government and health care providers – appears to be worse now than ever before. At least it has a higher profile now than anyone currently involved can remember.

An increasingly prevalent view is that the reductions in first year medical school enrolment which began in 1993/94 (and had amounted to about a 10% reduction by 1996/97) are a major cause of the “recent” problems with access in rural and remote areas; however this is incorrect. The problems existed well before enrolment cuts and more important, the main effects of those cuts would take at least six years (the minimum length of time it takes to train a doctor) to show up in location decisions. They would only now be beginning to appear. They may contribute to the problem in future if nothing else is done, but they are clearly not the reason for the high profile problems of the past several years. And even in the future, their likely impact will be small. If the reductions in intake have resulted in about 175 fewer entrants a year, and if about 10% of new graduates continue to choose to practice in rural/remote areas, this would mean a reduction of about 17-18 new graduates annually available for rural/remote practice, across the entire country. (Some confuse the reductions in first year undergraduate medical school intake with the reductions in the number of family medicine residencies, which may have had an earlier impact. This issue is addressed in a separate question below.)

What about billing number allocations or other similar regulatory/administrative approaches?

A number of provinces have had, or currently employ, policies that ‘direct’ where physicians can establish practices (or rather where they are eligible for reimbursement from the province’s medical plan). In most cases, these approaches have run afoul of the Canadian *Charter of Rights and Freedoms*, are currently the subject of legal proceedings based in part on violations of sections of the *Charter*, or have been challenged on such grounds but were withdrawn before reaching the courts. To date, no such policy has survived a court challenge (although not all policies have been challenged).

British Columbia has had the most experience with application of these schemes. Two attempts have been made to control where new practices could be established in the province. In each instance, the schemes were found to favour, without sufficient justification, established self-employed physicians over similarly qualified individuals wishing to provide the same services in the same locations under the same terms and conditions. Such policies have been found to violate inter-provincial/territorial mobility rights by conferring advantage on physicians already practising in a province relative to physicians wishing to enter practice in that province from elsewhere in the country. Clearly the courts have viewed the situation of self-employed physicians as quite different from an employment-based situation in which matters of “available positions” and “seniority” might come into play.

Because these schemes have run into legal turbulence, none has ever been in place for a sufficient period to assess its effectiveness in improving the distribution of physicians. In the case of British Columbia in the mid-1980s, the evidence that is available suggests that physicians tended to take up *locum* opportunities in urban settings rather than establishing new practices in rural and remote areas of the province. That policy also ran into significant administrative problems which would be likely to plague any similar initiatives. For example, ensuring fairness in the selection of candidates for billing numbers was problematic.

Experiences elsewhere suggest that administrative/regulatory approaches can be effective in improving physician distribution. In particular, the so-called “negative directions” policy in the United Kingdom appears, in conjunction with other policy approaches, to have been quite successful in directing new primary care practitioners to areas with relatively sparser supply per capita. Australia has recently launched a **national** provider numbers policy which uses restrictions in the availability of post-MD training programs to channel new physicians into gaining experience in hospital posts (the idea being that most available posts will be in smaller communities). It is too early yet to tell how effective this policy will be in affecting distribution.

It appears that an effective approach in Canada would need to be truly pan-Canadian, both in order to survive a *Charter* challenge (and that cannot, of course, be assured even with such a policy) and because otherwise physicians may simply move to provinces/territories which do not have such a policy in place, rather than moving to areas in which they do not wish to live and practice within their 'home' province or territory. Even then, there is no way to ascertain whether such a pan-Canadian policy might not simply encourage more movement of physicians to other countries, particularly the United States.

Will financial incentives for rural and remote practice help?

Financial incentives already are used extensively by all provinces and territories, and have been for many years, but have had only limited success. Still, they are the most commonly used policy strategy in Canada.

The incentives have taken many forms: subsidized incomes or guaranteed minimum income contracts, differential fees for practice in over-serviced and under-serviced areas, special salaries, grants or bonuses tied to return of service, special travel allowances, special funding for *locum* support, assistance with practice establishment costs, paid vacation time, special on-call payments for emergency coverage, undergraduate and postgraduate student loans/grants/bursaries with return-of-service conditions, special funding for residency skill development and/or travel to summer placements, financial support for continuing medical education, and northern or isolation allowances. As can be seen from the above list, they have also been used for several different objectives: to encourage medical students and residents to consider such practices, to induce new and established physicians to locate in rural or remote areas, and to retain those who do so.

While they should not be dismissed (and have worked well for some communities some of the time), financial incentives as a general strategy have clearly not solved the problem, despite the fact that they have come in numerous forms and amounts. Given their long track record, they seem unlikely to do so in the future. This should not be surprising in light of what is known about the factors influencing physicians' choice of practice location. Financial factors are well down the list, behind things like personal background, family and especially spousal considerations, professional education/support/practice factors, and community factors. (Furthermore, many people would argue that they would be uncomfortable knowing that their community physician is there "only for the money". This is part of the answer to those who would argue that financial incentives have simply not been large enough. The other part of the answer is that at some level of compensation, the costs of competing approaches become much more attractive.) Given that most practice opportunities in major urban centres continue to offer the potential of reasonable incomes, it is also not surprising that most physicians choose to locate and remain there, enjoying the attributes of the urban centres on personal, family and professional dimensions.

Indeed, it can be argued that the main effect of increased levels of remuneration of various types for rural and remote practice is to reward those who might locate there anyway, or who have already done so largely for non-financial reasons. This is not unimportant, as most people agree that the physicians who accept the challenges and stresses of practice in such locations deserve to be fairly compensated for them. But increasing incomes for those in rural/remote practice as a matter of appropriate compensation for the unique challenges and stresses associated with such practice is a

different issue from doing so explicitly for recruitment purposes.

It is also worth noting that, depending on how they are designed, some financial incentives (including northern/isolation allowances and on call payments) can actually work against recruitment, or at least put physicians already in rural and remote regions in an awkward position. This is the case if new arrivals threaten base incomes or isolation or on-call supplements that are tied to low physician availability, either through contractual clauses or through sharing of the fee-for-service income from a population. While existing physicians might dearly want and need colleagues for professional support/relief reasons, (and the region might need the increased availability of service), the so-called “financial incentives” may make them reconsider the welcome mat.

Why not increase the recruitment/entry of foreign medical graduates (FMGs)?

Physicians trained outside Canada (FMGs) have played a very important role in providing medical services to communities across this country that have had difficulty recruiting or retaining Canadian-trained physicians. So what's the problem? There appear, in fact, to be several. First, while Canadian communities or their local physicians are often able to recruit FMGs, they seldom 'stick'; over time they, like their Canadian counterparts, disproportionately migrate to urban settings, thereby exacerbating situations of over-supply or pushing adequately supplied communities into an over-supply situation. Second, one hears reports that some established physicians are actually dissuading Canadian-trained physicians from settling in their communities because foreign physicians brought in on temporary work visas are often prepared to purchase or buy into a practice or pay monthly expenses to an established physician in exchange for entry to Canada. These arrangements can result in high turnover, increased physician supply and **restricted** opportunities in rural and remote areas for graduates of Canadian medical schools. If such arrangements exist, their significance warrants investigation. Third, relying on FMGs averts the need to deal directly with the fact that, although our domestic training capacity may be adequate, the location decisions of graduates continue not to align with relative geographic needs.

FMGs have, historically, entered the country in a number of different ways:

- recruited into post-MD residency training programs where there were insufficient Canadians interested in pursuing training in particular specialties but where the training program capacity was maintained for other reasons (e.g. perceived need for the specialists; or to meet institutional or regional service expectations). This route into the country was largely closed off in the early 1990s, when medical schools agreed to no longer allow visa trainees to enter ministry-funded positions;
- as foreign-funded visa trainees, with the understanding that they would return to their country of origin upon completion of their residency training. This is still a common, perhaps increasingly common, arrangement, raising the obvious question about the proportions returning;
- as 'special circumstance' academic recruits;
- recruited into rural or remote communities that were having trouble recruiting Canadian medical graduates (CMGs). These FMGs will often not have completed the necessary post-MD training (most jurisdictions require at least one year of post-MD training in Canada for full College registration); as a result they will be granted "conditional registration", a condition being that they can practice only in certain locations for a specified period of time;
- through a family reunification program or as refugees. This group of FMGs

have had difficulty gaining access to practice opportunities in Canada, for a variety of complicated reasons. In general, the problem is that these FMGs will not have met the Canadian requirements for post-MD training (rotations of specific lengths in specific clinical areas). While there are some post-MD training spots dedicated as entry portals for these FMGs, the numbers of such entry positions fall far short of the number of FMGs wishing to take advantage of them.

Historically only the fourth of these five routes has provided any significant component of the rural and remote area physician supply for the country. Those physicians recruited into rural/remote areas do not, however, sign life-long contracts. They, like their Canadian counterparts, disproportionately prefer to practice in urban settings, and seem in many cases to use the rural/remote positions as an expeditious route to landed immigrant status and eventually to practise in Canada wherever they wish. This is the reason that the proportion of physicians who are FMGs is so similar in urban and non-urban areas. While it is assumed by many that a large proportion of physicians practising in non-urban areas of the country are FMGs, in fact in 1998 only about 26% of those practising outside census metropolitan areas were FMGs. This was not appreciably different than the overall ratio of FMGs to all practising physicians in Canada.

As a result, Canada has used a continuous stream of FMGs as short term solutions to persistent long-term problems; while there is no disputing the fact that they have provided important primary care access in many regions that would otherwise have done without, it is no less true that over the longer term they have tended to exacerbate urban oversupply situations, thereby creating additional pressure on global budgets. Overall, just over 10% of all FMGs practicing in Canada were found in a recent survey to be located outside urban centres. Again, this was virtually identical to the percent of all CMGs practicing outside urban centres.

One logical response to this dilemma might go something like this: since Canadian graduates continue to show disinterest in practicing where the greatest needs are, and since we know we can make arrangements to have FMGs meet many of those needs, why not simply recruit more FMGs and train fewer Canadians? The mix of recruits and trainees could be adjusted so as to ensure an adequate overall supply, and an appropriate mix of specialists, and one might gain significant savings on the training side.

Well, as with all simple solutions, this one is quick, simple, and doomed. First, it could conceivably create new problems around the critical mass necessary to maintain quality family practice residency training programs; second, it would create potentially significant new problems in providing care in situations where considerable amounts of care are currently provided by residents; and, as if these were not enough, third, it would create a political nightmare to have a situation where opportunities for Canadians were being reduced at the same time as government policy was resulting in additional FMGs entering the country to practice.

But what about that fifth pool of FMGs, who have not been recruited but have entered the country for other reasons? Do they not represent a potential solution to the problem of access in rural and remote regions of the country? Again, what appears on the surface to

be a simple solution is, in fact, rather more nuanced, involving considerations of training standards, competency testing, opportunities for post-graduate training, and so on. But perhaps most fundamentally, since these individuals enter the country and become landed immigrants and eventually Canadian citizens, it is difficult to see how one could implement some sort of return-of-service or geographically restricted practice requirement for this pool of FMGs without it being part of a more general policy (see below for a discussion of the more general problems with a return-of-service approach). Focusing such a policy on this group alone would likely run afoul of *Charter* rights.

There is another reason not to embrace a policy of ramping up FMG recruitment. Relying too heavily on graduates trained outside the country leaves the country hostage to changes in the international 'market' for physicians. For example, if changes such as those that have increased requirements for primary care physicians as 'case managers' in the U.S. were to take place in other countries from which Canada imports physicians, it is quite conceivable that those sources of supply could dry up. Were Canada to be in a situation where it had reduced its dependence on home-grown graduates because of the readily available foreign supply, such a change in circumstances could have dire consequences. In addition, recruiting foreign physicians may exacerbate physician supply or distribution problems in the originating countries.

Why not use the licensure process to channel physicians to where they are needed?

Since every physician who practices in a particular province or territory must receive a licence of some sort (temporary, permanent, conditional, etc.) from that jurisdiction's licensing authority, some have suggested that having the local College issue conditional or provisional licences to new entrants would go some way toward improving access in rural and remote areas. The conditional licences would come with geographic restrictions, so that, for example, for the first five years of practice, a physician was licensed to provide services only in certain specified areas of the licensing jurisdiction.

In practice such an approach would be relatively indistinguishable from a “billing numbers” policy controlled by the funding agency. It would, undoubtedly, quickly become an object of legal action, on grounds similar to those under which billing numbers policies have been contested (violation of sec. 6 (mobility) rights, among others).

But there would seem to be a more fundamental problem with this approach. The responsibility of provincial/territorial licensing authorities is to grant licences to duly trained physicians who have demonstrated the necessary competence to practice in their chosen specialty, and to protect the public from physicians who fail to meet professional standards of practice. To ask those authorities to withhold an unconditional licence from a physician who has met all the necessary qualifying requirements but who wishes to practice somewhere other than the locations attached in the “conditions” set out for a conditional licence, would seem to be asking them to exercise authority beyond that provided in the regulations under which they operate.

As if these issues were not enough, there is also the matter that leaving such decisions in the hands of each provincial/territorial licensing body would do little, if anything, to promote a coordinated approach to improving national distribution of physician services.

Is a nationally-based return-of-service program worth considering?

The feasibility of such a plan is highly questionable.

Return-of-service arrangements have been tried in some provinces for many years, and some are still employed. Through these arrangements, medical students and residents receive grants, loans or bursaries in exchange for agreeing to locate in a designated geographic area for a specified period upon completion of their training. The general experience of provinces with these programs has been that participants often exercise their option to buy their way out of the service commitment, and even when they do not, the programs have a limited effect on retention.

A national return-of-service program would presumably be much more ambitious, stringent, and coercive. The idea most frequently suggested is that every medical student would be accepted into medical school (at a relatively low, possibly zero, tuition fee) on the understanding/contract that upon completion of training he or she would owe the country a specified number of years of paid service in a designated rural or remote area or specialty. Several variants of the program can be imagined; for example, the length of the service period could be inversely related to the remoteness of the area, or a special program stream could be created to provide increased coverage of rural emergency rooms. A basic principle, however, would be that the remuneration method would be other than fee-for-service. During the return-of-service period, it would be understood that participants were being paid for providing public service in return for public education, on their way to practice in a publicly funded health care system.

If such a program could be developed and maintained, it would undoubtedly improve the situation. As can be quickly appreciated, however, the administrative resources required are substantial, and its operation could be both a political and logistical nightmare. Identification of priority locations and services, allocation of graduates, allowances for special personal/family circumstances, monitoring and enforcement of service contracts, policies for foreign graduates or Canadians returning from training abroad – just to highlight only a few issues – are complex matters. And the whole thing would have to be nationally agreed and co-ordinated on an ongoing basis. For example, graduates from the University of Alberta might need to be prepared to practice in remote areas of Newfoundland, if such areas were at the top of the priority list on graduation.

The legal aspects are just as questionable as the operational feasibility. At the end of the day, the effects of a return-of-service strategy may be found by the courts to be no different than those of a billing numbers policy affecting new entrants in that both treat existing and newly graduating physicians differently. A national return-of-service program would almost certainly generate a *Charter* challenge.

Could an individual province implement a mandatory return-of-service program in the

absence of a national program?. Such a program would be subject to many of the same logistical and legal uncertainties noted above. In addition, its enforcement would require inter-provincial/territorial cooperation in denying access to practice to graduates from a province who were attempting to violate their return-of-service agreement.

What scope is there for increased emphasis on educational initiatives?

This is currently an open question since some specific educational practices and policies appear to have increased the number of physicians in rural/remote practice but, overall, educational strategies have received relatively little attention compared to financial incentive strategies.

There are numerous points in the medical career life-cycle where strategies might be or have been pursued through education programs and institutions, including:

- science education and career counseling in rural high schools;
- a focus on recruiting/admitting more medical students from rural or remote areas, and from aboriginal groups;
- positive promotion of rural practice generally within medical schools and curriculum modification to reinforce this;
- exposure of medical undergraduates to rural/remote practice settings, the challenges and rewards of those settings, and the special needs of rural/remote communities;
- similar exposures for medical residents, including extended periods of experience with rural/remote preceptors;
- extended opportunities for practising physicians for skills upgrading/continuing education geared to rural/remote practice;
- opportunities for existing physicians to re-enter training to specialize in areas of need in rural/remote areas.

The number of educational initiatives is growing, particularly opportunities for undergraduate and postgraduate placements in rural/remote areas, and research is increasingly being conducted to assess the effect of some of the initiatives on recruitment and retention. For example, the importance of recruiting and admitting future physicians who have grown up in rural and remote settings now seems clearly established (everyone agrees that it is better to recruit physicians who **want** to live in these areas, than to have to rely on coercive policies or financial incentives through which one is likely to ‘attract’ physicians who would prefer to be somewhere else). However, the overall impression that one gets both from the existing literature and from speaking with individuals involved in educational strategies is that only a fraction of what could be done in this area is currently being done.

What would happen if significant financial support and human resources were committed to pursuing vigorously strategies at all or most of the points above (and perhaps others), ignoring for a moment the difficulties of implementing such a plan? It is hard to know the answer to this, but neither informed opinion nor current research evidence suggests that educational strategies alone will turn the tide. Indeed, evidence to date suggests that the returns to a vigorous approach here may be less than expected. It is also difficult to make an assessment independent of other policies affecting remuneration, support, etc.

Nevertheless education programs remain a potentially fruitful, not yet fully exploited, policy route.

A final caveat: it is very important not to view “educational initiatives” too narrowly or traditionally. There is much room for creativity and innovation here. For example, collaboration between medical and nursing schools to train nurse practitioners alongside family physicians with a focus on rural practice should be in the set of strategies (see below).

Is there scope for re-examining the mix of residency opportunities?

As we noted above, the combination of shifting from a rotating internship requirement to a minimum two-year residency training program for family practice, together with the decisions taken about the overall mix of residency positions, have meant that fewer physicians are now leaving the training pipeline with general/family practice credentials and skills than was the case at the beginning of this decade. Since it is general/family practitioners who are the most likely to take up practice in rural and remote areas of the country, this is likely to have exacerbated the problems of recruitment and retention in those areas.

There would seem to be some potential in having the National Co-ordinating Committee on Post-graduate Medical Training revisit the shifts in mix of residency training positions during the past decade, as part of their ongoing mandate to ensure that the mix of publicly funded positions aligns with best estimates of future requirements. In particular, if it can be confirmed that one of the (perhaps unintended) side-effects of these policy changes has been to reduce the relative production of family practitioners, such side effects should receive priority attention from provincial/territorial Ministries of Health and from academic health centres across the country.

Any such re-examination must, however, be part of a more global monitoring of academic health centre throughput in all specialties relative to projected requirements. For example, one would not wish to see more family practitioner residency positions established at the expense of residency programs training generalist specialists who also represent important sources of care for non-urban communities and who are likely to be in relative short supply in the near future (general surgery comes to mind).

It may also be worth revisiting the availability of specialty re-entry positions for family practitioners who wish to undertake additional specialty training. As noted above, the relatively restricted ‘change your mind’ opportunities may be resulting in final specialty choices being made earlier because the perception (and the reality) may be that choices once made are now more difficult to change. If this bottleneck were to be loosened somewhat, one might find more MDs willing to complete a family practice residency and practice for a few years in rural or remote areas before returning for specialty training. Indeed, one might even consider providing specialty re-entry portals for family practitioners who do precisely this. Since it is unrealistic to think about meeting all rural and remote area needs with physicians who take up ‘permanent’ residence in such communities, having a steady supply of Canadian family practitioners prepared to commit, say, three to five years to such communities might be a significant step in the right direction.

Don't professional support programs help?

The short answer to the question of whether such programs help is “sometimes”.

“Professional support” programs are initiatives taken by Ministries of Health, medical associations, local communities or academic health centres, to improve the conditions under which physicians in rural and remote areas often must work. Without pretending to be exhaustive, we would include under this umbrella any policies whose primary intent is to provide relief from unreasonable on-call scheduling; back-up so that holidays can be taken; continuing education opportunities which would enhance skills required in these settings; and access to complementary personnel such as nurses or nurse practitioners, specialist consultation (e.g. through itinerant specialist arrangements and/or telecommunications technologies), and complementary facilities, supplies and diagnostic/therapeutic equipment.

Programs intended to provide on-call relief are made necessary by the reality of small population bases – it is often difficult to justify more than one full-time physician in a small community, when a minimum of three, for example, might be required to provide reasonable on-call relief – and by the fact that in many communities that do have sufficient populations to support more than one physician, recruiting remains problematic. Such situations may be made worse by the fact that physicians in these communities are paid fees-for-services; there is insufficient work to support the addition of another physician if payment is to be by fees, yet the need for on-call relief remains.

We do have extensive experience in this country with attempts to increase recruitment and encourage retention through the use of such policies. Most common are *locum* relief pools, continuing education subsidies, itinerant specialist programs, and more recently a number of emerging telemedicine initiatives. There is no question that many of these programs have provided some help in some situations. Are they enough? On the experience to date, clearly not. Can they ever be enough? We view these types of approaches as necessary but not sufficient. They need to be part of a comprehensive approach to addressing the problem, but cannot, by themselves, be looked to as a solution.

Attempts to maintain professional support programs have been plagued by a number of problems, such as difficulty in staffing *locum* programs; difficulty maintaining itinerant specialist programs; and the fact that *locums* are unlikely to be able to address continuous call problems (e.g. 1 night in 3 or more frequent) which lead to burn-out of local physicians.

Unfortunately recent controversies related to payment for on-call have created considerable confusion about the nature and extent of the on-call problems faced by physicians practising in smaller communities. In particular, some rural/remote area physicians have argued that real relief is spelled “*money*”. In other words, a little supplement for being on-call will make too-frequent on-call more palatable. Some recent agreements to pay physicians for on-call time in selected communities where physicians were already receiving geographic fee supplements have created significant new inequities, and may have made it more, rather than less, difficult to recruit and retain additional physician resources in some of those communities.

What about family/spousal support initiatives?

A clear message emerging from the extensive research that has looked at what factors influence physicians' decisions about where to practice medicine is that matters affecting the lives of spouses and children are among the most important considerations. Internes, residents, and recently licensed physicians invariably rank this cluster of factors at or near the top of the list of priorities affecting location decisions. Opportunities for (particularly professional) spousal employment, and recreational and educational opportunities for children are paramount. This becomes intertwined with the issue of professional relief, in so far as being on-call affects family life.

This constellation of factors is clearly the least amenable to provincial/territorial policy intervention (with the exception of on-call relief, discussed above). It is, as noted earlier, impossible to imbue a small town with big city perks and opportunities. And, indeed, a recent comprehensive review of initiatives across the country (the Health Canada report noted earlier) revealed nothing in the way of provincial/territorial initiatives to address 'family matters'. Nevertheless, this should not be taken to mean that nothing can ever be done. Many communities take matters into their own hands, trying to create an attractive personal and professional environment for new recruits, with variable success.

There is also mileage to be gained from attempting to recruit more future physicians from the areas to which one hopes they will return, or perhaps even more importantly, from attempting to identify potential future physicians with spouses from such communities. But this gets back into education-related initiatives. On the professional support front, beyond on-call relief, or providing periodic paid holidays for physician and family, few options come to mind.

But if it is the case that there are few effective ways of addressing what young physicians claim are their predominant preoccupations at the point location choices are made, this would seem to send a powerful and unmistakable message to policy-makers about the 'science of the possible'.

How does the present organization of medical care help or hurt the rural/remote situation?

Two central features of the current system – the fee-for-service payment method, and the status of physicians as self-employed professionals – together create a situation in which provincial and territorial governments can encourage but cannot ensure a geographic distribution of physicians that corresponds to the needs of the population or the preferences of communities.

Most Canadians know that their provincial and territorial governments are responsible for assuring access to needed physician services, but few fully understand the workings of the health care system, the roles of the various institutions and players, the interests of these players, or the incentives and constraints they face. It is difficult for them to appreciate why problems of access, once identified, cannot be “fixed” by government.

However, most physicians are self-employed. Their practices are private business enterprises and they are free to choose which services to provide, their hours of work, and where they choose to locate, based on their own interests, personal considerations, judgement and sense of responsibility. Increasingly, in urban areas for example, physicians appear to be basing their practice decisions around lifestyle considerations, choosing not to practice obstetrics or provide hospital coverage, or choosing *locums* or contract work over establishing an independent full-service practice.

Moreover, due to the nature of medical services and the predominantly fee-for-service method of paying physicians, it is usually possible to make a very reasonable living even in urban areas that are well-supplied or over-supplied with physicians. The urban alternatives, which most physicians prefer because they offer professional and institutional capacity and support as well as social amenities, are therefore relatively unrestricted.

Nevertheless, though they are private participants, physicians practice within and are paid largely by a public system. Their payors, provincial/territorial governments, are accountable to the citizenry for providing appropriate and equitable access to medical services. Yet they have few, if any, effective and reliable mechanisms for controlling the location decisions of the physicians on whom they must rely.

This is not a problem of ‘bad people’ making irresponsible decisions; most physicians are highly dedicated and caring professionals, and provincial/territorial officials likewise have the interests of patients and prospective patients in mind. It is a problem of ‘bad system design’, at least as it relates to the problem of access to physician services in rural/remote areas. This problem does not provide grounds for altering the single-payor public-finance model of ‘medicare’ that has by and large served Canadians well, and

made medicare the country's most highly valued social program. It does underline the need for new institutional mechanisms to allow provincial and territorial governments to meet their responsibilities.

Nor does it, as some may fear, support the view that physicians should become civil servants. Rather, what is needed are new mechanisms – be they financial, managerial, or educational – that ensure that the health care needs of the population are met by the sum of the myriad private decisions of physicians.

The alignment of private interests with public goals in a way that is perceived to be “fair” by all parties is a formidable task and should be acknowledged as such. The transition from the current system is possible, but it will be difficult; it will require strong political will. And the number of policy avenues that remain largely untested and hold some promise is limited, but there are a few.

Section III: FUTURE DIRECTIONS

Where do we go from here?

In 1991 we noted that “[b]ecause of the distribution of Canada’s population, we do not feel that this problem will ever be solved to everyone’s satisfaction, particularly if it is viewed narrowly as a physician resource problem.” Nothing in our review for this background paper suggests that we should alter this view. We have noted a number of areas above where some gains might yet be made. For example, the variants on regulatory/administrative approaches which restrict where physicians are able to establish practices may not yet have been exhausted. But the virtual certainty of legal challenge, and the uncertainty of outcome (and of effect) suggest that investments elsewhere may bring greater returns.

Most of the other approaches reviewed above fall into one of two groups: a) those not likely to work, or that have not worked (e.g. use of the licensure process or increasing medical school enrolment); and b) those providing some benefits at least in some situations, but for which more of the same is not going to bring the major inroads sought by all parties affected by these problems (e.g. financial incentives; recruitment of FMGs).

If there were a simple, straightforward, solution to this challenge, it would have been found and tried long ago, if not in Canada, then elsewhere. There is not, and it has not. The problem is always going to be with us, in some form and to some extent. There are, we believe, ways to manage it which would lead to improvements relative to the existing situation. But they will take more than fiddling around the edges, another financial incentive here, a few more *locum* and itinerant specialist pools there. We are driven to the conclusion that any significant inroads are going to be found only in different, more systematic, approaches to thinking about the problem.

In our view, there are three such approaches worthy of further consideration and further development:

- a fundamental restructuring of the way in which funding for medical care is allocated and in which medical care is purchased;
- a far greater reliance on non-physician personnel with some additional training for front-line primary care in rural and remote regions of the country;
- new and expanded roles and responsibilities for academic health centres.

These are, of course, not mutually exclusive options. Choosing among and between them depends, in part, on whether the overarching objective is to improve access in rural and remote communities, or whether it is to ensure that there is at least one physician **living** in every small town in the country with sufficient population to support a potential practice. The answer to this question will dictate the nature of the policy choices available. Our view is that if the real objective is the latter, then this problem will remain a problem for the foreseeable future.

Below we provide a sketch (but not a detailed blueprint) of each approach, and run a ‘problem check’ for it. The ‘problem check’ allows us to assess each option against the key factors, described in the opening question above, which underlie the persistence of the geographic access problems. Those factors are the continued unfettered availability of urban alternatives; inadequate professional support and relief; spousal/family considerations; and historical policy decisions.

Rethinking the purchasing arrangements for medical care

The key guiding principle for a restructuring of allocation/purchasing arrangements is that funds for medical care be made available, on the basis of the size and characteristics of populations, to accountable agencies/organizations such as regional authorities or other non-profit health care organizations – in other words, medical care funding would follow people, and would then flow to providers who accept responsibility for caring for those people.

There are many ways such a restructuring might play out in practice, and we do not believe it is important to suggest here any particular model. As but one example, funds for medical care might be allocated to regional authorities in a manner similar to the way that funds for hospital care are now allocated in many parts of the country. The regional authority could then contract with provider groups (in- or outside the region) for the provision of a negotiated range of services for a specified population. Regional authorities could contract directly for specialty care, or sub-contract to provider groups who would, in turn, be responsible for ensuring adequate provision of secondary and tertiary services.

How individual physicians would be reimbursed for services would be a matter of negotiation between the physicians and those with whom they are contracting, but methods could range from entirely fees for services, to fixed sum contracts, with blended combinations being possible as well. For example, one might find capitation contracts with physician groups for a set of “core” services, supplemented by fees or other arrangements for the provision of specific ‘listed’ services, as is the case for the payment of general practitioners in the United Kingdom.

While our example above involves provinces/territories flowing medical care funding to regional authorities on the basis of size and composition of the registered populations in those regions, regions are not the only possible contractors for/purchasers of care. Provinces and territories could, for example, contract directly with provider-based or other organizations, which would, in turn take the responsibility for purchasing care on behalf of enrolled or ‘rostered’ populations.

It seems important to reinforce the idea that such a restructuring would need to be pan-Canadian if it is to be expected to provide an effective remedy to the problems of rural and remote communities. Absent such cross-country agreement, provinces and territories would likely be faced with whipsawing and increased migration between jurisdictions. Equally important is the notion of flexibility – individual contractors should be free to negotiate with provider groups, and provider groups should be free to make whatever arrangements they wish for the provision of the contracted services (including, for example, contracting with, or hiring, nurse practitioners to provide some components of primary care and on-call relief). In return for this autonomy and flexibility, however, both the contractors and the provider groups must be held accountable for the quality and integration of care provided to the populations for whom they have accepted responsibility.

We do not wish to minimize the logistical, political and, potentially, legal challenges posed by such a fundamental restructuring. How to determine appropriate allocation formulae, how to incorporate secondary and tertiary care, how to minimize risk-avoidance and risk-shifting, are among some of the immediately obvious logistical challenges. Any new funding arrangements will need to be designed to comply with the *Canada Health Act* and the *Competition Act*. And on the political front, it seems inevitable that such a restructuring will also mean new roles for physician associations which have historically negotiated fees and budgets on behalf of all members of the profession.

However, these ideas are not new. Demonstration/pilot projects incorporating some of these ideas are currently being developed in some parts of the country with federal government support, and many groups, including some physician groups, have been calling for similar initiatives for many years. Internationally one finds many examples of population-based funding in countries with health care systems as different as those in the United Kingdom, New Zealand and the United States. Indeed, Canada’s current approach to purchasing medical care is fast becoming out of step.

How is such a restructuring likely to address the fundamental problems underlying the current situation that we described in section I above? Its scope for improving access to medical care in rural and remote areas of the country comes from its potential to curtail

dramatically the availability of what we have called the ‘urban alternative’, since the new purchasing arrangements for medical care would be system-wide. One might expect that population-based allocation of funds for medical care would, initially, channel less funds to most urban areas and more to smaller regions of the province or territory. Depending on how the contracting was established, this could lead to more care being provided to populations in those smaller regions. Whether it also resulted in more physicians residing in those areas would depend on the contracting terms and conditions. For example, groups of urban physicians might contract with smaller rural and remote regions to provide care and coverage for those regions. Whether this meant placing physicians in particular communities full-time would be a matter of negotiation between the contractors and the provider groups.

The effects on the other key underlying causes of the problem are less obvious. With respect to lack of professional support and relief, contracting organizations would now be responsible for ensuring that call was organized in ways that met the needs of the communities. How this played out for individual communities and their physicians would likely vary. But it is not clear that the call/relief issues would be adequately resolved. This would hinge on the formulae by which funds are allocated to purchasers – if, for example, capitation rates for rural and remote areas reflected the need to provide or purchase relief, one might expect more impact on this problem. The family/spousal quality of life challenges would remain challenges – this type of restructuring does not directly address those issues. As for past policy decisions regarding rotating internships that have affected the numbers of Canadian-trained physicians likely to locate in rural and remote areas of the country, this approach would have no direct effect on reversing or altering those circumstances.

Such a restructuring offers a number of potential benefits. First, it encourages physicians to ‘go where the work is’ more so than is the case under the current predominantly fee-for-service reimbursement arrangements. Both public needs and the arrangements for meeting those needs, would be made more explicit. Second, it provides the potential for a more rational integration of all aspects of care. At the moment, for example, in parts of the country with regional authorities, funds for physician and ambulatory pharmaceutical services are allocated in a manner completely divorced from the allocation of funds for institutional and community programs. The result is regional authorities with a job to do, but without the tools to do it. Not only are regional authorities hamstrung, but to the extent that co-ordinated care means better quality care, patients suffer as well.

But this approach is not without its potential risks as well, and should there be a pan-Canadian initiative of this type, it will be important to head down this road with eyes open, with realistic expectations, and with a willingness and flexibility to fine-tune ‘on the fly’. For example, a wholesale move to purchasing primary care services largely through capitation-based contracting could exacerbate the current problems by

encouraging more students to choose specialty careers. If the residency positions are not available in Canada, those students might seek them in the United States or elsewhere. This points to the need to develop a consistent and coherent approach to the purchase of all medical care services, not just primary care. It is also possible that a wholesale restructuring of the type envisioned here would send more physicians south of the border seeking (an admittedly shrinking number of) opportunities to continue to practice in a fee-for-service environment. While we believe there is scope for, and potential in, pan-Canadian co-operation, there is absolutely no prospect of international co-operation in this respect.

Furthermore, one should not minimize the challenge on the accountability/quality monitoring fronts. Just as fee-for-service reimbursement embodies incentives to focus on the provision of services rather than on the health of patients, every other method of reimbursement has long been known to carry its own perverse incentives. Under capitation-based schemes, issues of risk-selection, risk-shifting, and under-provision of care become concerns. The design of any system that is based on the purchase of ‘care coverage’ rather than specific services, must incorporate explicit mechanisms to address these issues. They cannot be entirely removed; the challenge is to manage them in a fair, transparent, and accountable manner.

Offsetting this potentially daunting picture is the encouraging fact that a number of physicians and physician groups are seeking alternatives such as those described here, and the clear recognition among Ministry/Department of Health personnel of what it will take to develop the necessary support.

Increased training and use of non-physician personnel

The second general option has the potential to address more directly the issues of professional relief and family considerations. The expanded deployment of personnel such as nurse practitioners, with training sufficient to provide a considerable range of primary care services, enabled by appropriate adjustments on the regulatory front to allow expanded scopes of practice (e.g. prescribing) offers, in our view, significant untapped potential to address the problems of access to primary care, particularly in remote communities.

Here the policy package would require, at least:

- additional educational capacity that was able to train personnel with the skills necessary to provide a range of primary care services, often with light or no supervision (but with telephone or other access to consultation from physicians);
- regulatory modifications in those provinces/territories that have not already made them, for example to Acts governing the ordering of tests and the prescribing of medications;

- administrative funding arrangements that make it possible to employ such personnel.

On this last point, this option could clearly be pursued either alone or in combination with the more extensive changes in funding/purchasing outlined above.

Of course this approach only deals, in part, with **primary** care in rural and remote communities, and it is not without its own problems and challenges. Perhaps the most significant, and obvious, is the quagmire of stakeholder dynamics. The potential of nurse practitioners, and their acceptability to patients, have been known for decades. Indeed, the pathbreaking research in this area was Canadian. It was stakeholder dynamics and lack of political will which undermined the initiative two decades ago to introduce nurse practitioners into primary care in Canada and resulted in the closing of training programs for them. Yet even today both professional nursing organizations and physician organizations seem to be of many minds about the terms and conditions governing implementation. Nursing organizations are concerned that such positions are no longer “nursing”; medical associations are concerned about encroachment into the practice of medicine. What gets lost in such debates is the fact that these personnel represent a very real means of improving access to primary care in communities that currently do not have adequate access, and provide a source of relief and on-call coverage for over-stretched physicians even in communities that do have access.

In addition, this approach will have its own feasibility challenges. In the short run, nurse practitioners in Canada are in short supply; although some training capacity has been added recently, significantly more would be necessary. Furthermore, it would be important to link access to these training programs to commitments to provide service in rural and remote settings (as with similar suggestions for physicians, this raises enforcement issues). On the other hand, the opportunity for increased independence in practice seems likely to be a strong motivation for many potential candidates. Nurse practitioners who choose to practice in rural and remote settings will, of course, face some of the same personal and professional considerations (e.g. on-call, lack of colleagues, potential burn-out) as those faced by physicians choosing to practice in these settings. This policy approach will need to incorporate whatever measures may be possible to address such concerns.

A significant advantage of this approach is that training programs for these personnel are, and would be, designed to prepare graduates for practice in rural and remote communities. Applicants would, by the very process of applying to such programs, signal their interest in practising in these communities. This stands in stark contrast to the current situation with applicants to medical schools. Indeed, if the country can gear up to prepare sufficient numbers of nurse practitioners, and they are able to resolve many of the problems in remote communities across the country over time, it may be that this will relieve pressure on medical schools and even reduce the country’s primary care physician

training requirements. If we train primary care physicians who are not prepared to practice where the needs are, and at the same time train nurse practitioners who are, the appropriate adjustments would seem rather obvious.

How does this option address each of the fundamental issues underlying the problem situation? Additional nurse practitioners, as an isolated option, does not directly address the ‘urban alternatives’. To the extent that adjustments to medical training capacity are not made, and physicians continue to locate in urban areas, the nurse practitioner option will be an ‘add-on’ expense. On the other hand, nurse practitioners represent a real and viable approach to dealing head-on with at least some of the on-call and relief issues. Can they help with family/spousal issues? As noted above, individuals who enter training programs explicitly designed to train personnel for service in rural and remote communities are presumably prepared to live there. It seems likely that these programs would be better able to recruit applicants from those areas into the training programs than medical schools have been to date. Finally, does this option do anything to redress the effects of past training/licensure decisions on the medical side. Indirectly it does so by providing an alternative source of primary care expertise, and a source more likely to end up practising in some of the more remote areas of the country.

Thus, this seems overall a positive approach, with a high likelihood of making a significant difference. But this, like the first option of restructuring the funding and purchase of medical care, is likely to require a political battle (although perhaps not as pitched). Can this battle be won? We think yes; but if it cannot, or if the political will to take it on is simply not there, then we are leaving ourselves with a rapidly shrinking set of possibilities.

New responsibilities for Academic Health Centres

A third policy option to explore might be for provincial/territorial governments to assign the responsibility for appropriate service provision in designated rural and remote areas to specific academic health centres (AHCs), at the same time increasing their budgets substantially to allow them to fulfill this new role. Provincial/territorial governments would retain responsibility for setting standards for the performance of the role, and monitoring the performance of the academic centres.

One rationale for such a move is that assignment of responsibility to AHCs may be the only real “public management” option (perhaps other than regional health authorities) that provincial/territorial governments have left, arbitrary though it may be. A second rationale, however, is that in two of the other policy options which hold promise, AHCs will have to be integrally involved anyway. One is the training and deployment of nurse practitioners discussed immediately above. The other is the vigorous pursuit of a concerted approach to educational initiatives discussed earlier in this document, in which this family of strategies is pushed further to see what its maximum impact might be. In this case, the AHCs must play the lead role. Also if they have responsibility for service provision in the event that educational strategies to improve recruitment and retention

fail, there will be a very strong incentive to make adjustments to admissions processes, curricula and other programs that have been slow to change so far.

There would obviously be much to be worked out in the contracts between provincial/territorial governments and the centres. This approach would require the centres to embrace an expanded mission that brought them into closer alignment with social needs. It would also require an ongoing and rigorous monitoring and accountability relationship between the centres and provincial/territorial governments. Each party would have to develop new skills and mechanisms for this accountability relationship to work.

But this option does have the potential to utilize further some “best educational practices” that might respect personal/family considerations by attracting to rural and remote areas individuals whose preference it is to be there, while at the same time giving responsibility to organizations that have the capability within their institutional umbrellas to provide the needed professional support and relief, including telemedicine support, that is so important to rural/remote physicians. Furthermore, if these “best practices” fall short of solving the problem, AHCs are large enough organizations that they should be able to design delivery models that spread the load of providing services across a number of departments and individuals.

One disadvantage of the AHC option is that it does not alter the situation of unfettered urban alternatives and the expenditure pressures they create for provincial/territorial governments and medical associations. It just sidesteps the issue. Another disadvantage is that it may eventually lead to a “solution” in which communities have access to services but without resident physicians (or at least not the same ones, even over short periods), which doubtless is only a second-best solution from the communities’ point of view. A third consideration is that it places a significant management burden on the AHCs that they may not be equipped, or willing or able to equip themselves, to handle. Without further development of the policy option, it is not clear that effective accountability mechanisms could be designed. With respect to the last of our fundamental problems, the effects of past policy decisions on residency training, this strategy gives AHCs an incentive to participate in attempts to make necessary adjustments.

A final concern is that this route, by adding to the service delivery role that AHCs may already have in specialty care, will further distract the centres from their core missions of training and research. On the other hand, however, it can be argued that the training mission broadly viewed is to train the types and numbers of physicians that the population requires. To the extent that current maldistribution problems stem from selection processes which don’t do well at identifying future rural/remote candidates, or from feelings on the part of graduate physicians that they are ill-equipped to practice outside

urban areas, then it may be appropriate to direct AHCs to take a more energetic interest in the problems.

Like the funding/purchasing option, this initiative would need to be pan-Canadian in nature. Each AHC would be responsible for certain regions of the country, and all regions (including those in provinces/territories without AHCs) would need to be covered.

So, what's the bottom line?

The bottom line is that the issue of access to medical services in rural and remote areas is one of the most complex and difficult problems in health care policy, and it should not be approached with the expectation that it will ever be “solved” completely, to the satisfaction of all parties. The root of the problem is the fact that many people, physicians included, prefer urban living, and policies can't change human nature.

But policies can compound or ameliorate the problems created by it, and several characteristics of the current system do not help the situation. For that reason, to make headway will require co-ordinated policy action on multiple fronts. Increased inter-provincial/territorial co-operation will also be essential.

Precisely because the problem has until now been so resistant to the efforts of many dedicated individuals and organizations, we are reluctant to recommend dropping any of the current strategies that may be having at least limited success for some communities. We are equally reluctant to suggest a revisiting of “billing numbers” strategies. In many ways, although it is unfortunately coercive, a nationally-applied “billing numbers” option has the potential to be the most effective solution, and the least costly. There is also a case for it as an appropriate management mechanism to direct publicly financed physician resources to areas of public need. The legal viability of this option, even including carefully designed variants of the original B.C. policy, is far from certain however. Provincial/territorial governments would be unwise to count on it.

As for future directions, there appear to be three relatively less traveled roads to try. First, and perhaps foremost, are changes to the funding/purchasing models for medical services to link funding to populations rather than to providers and their institutions in the first instance. This option has the potential to alter dramatically the landscape of medical politics, would be consistent with most provinces' recent regionalization initiatives, and might complement provinces' avowed intentions to “reform primary care”, although it may be politically challenging to implement.

Second, much more extensive use could be made of non-physician personnel such as nurse practitioners, working in close consultation with regionally-based physicians. This option would require significant additional investments in training capacity and significant changes to existing regulations if it is to be fully exploited. It would also require more extensive inter-professional collaboration than we have witnessed to date, both in the ‘field’, and within academic training institutions across the country. And it too promises to be tiring politically. But it has long been known that a non-trivial portion of primary care can be delivered safely, effectively, cost-effectively and in a manner satisfactory to patients by health care professionals other than physicians.

Third, an all-out effort could be mounted to use education-related strategies affecting physicians throughout their career life-cycle to improve recruitment and retention either with or without provincial/territorial governments assigning managerial responsibility for rural/remote access to academic health centres. This would clearly require new resources for those centres. Assignment of responsibility would again represent a major change to the accountabilities within the current health care system and to the role of the AHCs, although it would at least centralize responsibility and resources with the single institution most likely to be capable of dealing with both personal and professional dimensions of the problem. The potential impact of the all-out education-related strategy is unknown, though there is some evidence of as yet unrealized gains. The outcomes of assignment of responsibility to AHCs are at this point unknown.

All of these options require serious political will, sustained over a long period. Whether this will exists, and can be sustained across electoral cycles and over a varied political landscape (since a pan-Canadian approach is essential) are empirical questions. Time will tell. The problem is a serious one, however, and appears to have risen close to the top of the health policy crisis pile. And while the existing array of strategies is better than doing nothing, it has not prevented the sharpening of rural/remote access as a policy issue. Something different and additional will have to be done in future if rural/remote access is to be improved.