Commission on the
Future of Health Care
in Canada

Commission sur
l'avenir des soins de santé
au Canada

ISSUE/SURVEY PAPER

Health Human Resources in Canada's healthcare system

JULY 2002

This paper is one of a series of nine public issue/survey papers designed to help Canadians make informed decisions about the future of Canada's healthcare system. Each of these research-based papers explores three potential courses of action to address key healthcare challenges. Canada may choose to pursue some, none, or all of these courses of action; in addition, many other options are available but not described here. These research highlights were prepared for the Commission on the Future of Health Care in Canada, by the Canadian Health Services Research Foundation.

Thank you for your interest in shaping the future of Canada's healthcare system.

This issue/survey paper on health human resources in Canada's healthcare system is one of a series of nine such documents the Commission on the Future of Health Care in Canada has developed in partnership with the Canadian Health Services Research Foundation. They were designed to enable Canadians to be better informed about some of the key challenges confronting their health care system and to express their preferences on proposed solutions. We have worked hard to summarize relevant, factual information and to make it as balanced and accessible as possible.

Each of our nine documents follows an identical format. We begin by briefly summarizing a particular health issue. Next, we identify three possible courses of action to address the issue and their respective pros and cons. Last, we ask you to complete a brief survey relating to the courses of action.

To make it easier to provide us with your responses, the survey questions are included on the final pages of this document. Please detach and forward these pages to us by fax at: (613) 992-3782, or by mail at:

Commission on the Future of Health Care in Canada
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Ottawa, Ontario
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You can also complete the survey on-line through our interactive website at: www.healthcarecommission.ca.

There are no "right" or "wrong" answers, and the results are intended to be informational only. They are designed to illustrate how each person's response fits within the context of others who have responded, not to have scientific validity in and of themselves. The survey results are only one of many ways the Commission is studying and analyzing this issue. To order other titles in this series, please write to us at the address above, or call 1-800-793-6161. Other titles include:

- Homecare in Canada
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- The Canada Health Act
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- Medically necessary care: what is it, and who decides?

We are grateful for your contribution to shaping Canada's healthcare system and hope that this document will be as informative to you, as we know your survey responses will be valuable to us.

Sincerely,

Roy Romanow

Human resources in Canada's healthcare system

Two years ago, Halifax's Capital District Health Authority announced that it urgently needed 175 more nurses to meet the demands in its hospitals. It also cancelled a successful liver-transplant program because there were no surgeons to do the operations. Similar tales are heard across the country.

Staffing Canada's healthcare system has become a huge concern for healthcare managers and policy makers, who recently named human resources as their biggest challenge over the next few years. And it's not just a question of having a lot of people to work in the healthcare system; it's also about making sure healthcare workers are well-distributed through the provinces and among urban, rural and remote areas. Nor are the concerns limited to nurses and doctors. There are many jobs in healthcare going unfilled, from positions in medical laboratories and rehabilitation centres to the posts responsible for running cancer treatment machines.

How to deal with what some call a human-resources "crisis" is much discussed. Some feel more money for educating and hiring would solve the problem. Others argue we actually don't need more people — we instead need to re-think how we deliver healthcare.

This paper addresses whether:

I. Government should invest in increasing the number of doctors and nurses working in Canada;

II. Governments and healthcare employers should change laws, regulations and employment agreements to better match healthcare practitioners' jobs to their training;

III. Governments should use financial incentives to better distribute healthcare practitioners between and within provinces.

Increasing the number of doctors and nurses

Across Canada, the numbers don't look good. The Ontario Medical Association says that almost one million Ontarians don't have timely access to physician care and claims that number could jump to two million by 2010. Similarly, the report of the Alberta Premier's Advisory Council on Health in 2001 noted that Alberta needed 333 more full-time doctors and estimated they'd need another 1,329 within four years — a 29 percent jump.

In 2000, the number of registered nurses employed in nursing per 10,000 Canadians rose slightly, from 74.6 in 1999 to 75.4 in 2000. But numbers were still lower than they were in the early 1990s.

There are many reasons for these discouraging numbers: both the physician and the nursing workforce are aging, training takes longer, healthcare workers are retiring earlier than they did 30 years ago, and there doesn't seem to be enough new graduates to take their place.

Course of Action: Government should invest in increasing the number of doctors and nurses working in Canada.

In the 1960s, the federal government felt that Canada's 12 medical schools and their 800 graduates each year wouldn't be enough to care for our growing population, so four new medical schools were opened. By 1969, the number of physicians graduating each year doubled to 1,600.

A major study in the early 1990s concluded we had too many physicians, and recommended cutting the number of medical students by 10 percent. However, those cuts were supposed to be just part of major changes to how we used physicians and how the health system is organized. Few of these other changes were made; as a result, the plan is widely believed to have led to a shortage of doctors, although new research suggests other factors, including retirements, fewer immigrant doctors and medical graduates taking more training instead of starting to practice, all contributed to the decline in the number of working physicians.

The number of nurses has also dropped over the years. Nearly 10 percent of new nursing graduates left to work in the U.S. between 1995 and 1997. The number of registered nurses working full-time in Canada dropped 8.5 percent between 1990 and 1997 (except for Quebec, where numbers weren't available). After severe cuts to hospital budgets in the mid 1990s made jobs hard to come by, enrolment dropped dramatically in nursing schools and more graduates went looking for work outside the country. Nurses have also been taking more training than before, due to increasing educational requirements.

Steps have already been taken to increase the number of doctors and nurses graduating in Canada — schools across the country are admitting more students, and a new medical school (focused on producing doctors willing to work outside of big cities) will open in Northern Ontario in 2004.

The first thing we need to do is settle on what the "right" number of caregivers is — some say we don't need more, we just need to use the ones we have more efficiently. If there's a consensus that we do need more doctors and nurses, we could encourage students to study healthcare through easier student loans and programs to attract Canadians from minority groups.

Short-term efforts could include recruiting physicians and nurses from other countries — although this is often seen as poaching graduates desperately needed in their own countries. Efforts could also be made to repatriate Canadian health professionals who have moved away.

Money, full-time positions, working conditions, support services, and many other factors would need to be incorporated into healthcare policies with the aim of recruiting, retaining and repatriating doctors and nurses.

Arguments for

Compared to most industrialized countries, we don't have many doctors and nurses. When measured against other members of the Organization for Economic Cooperation Development, the ratios of how many doctors and nurses we have per 1,000 people is low. In 1999, we only had 2.1 doctors per 1,000 people, which is one-third below the OECD average of 3.0. As for nurses, the ratio increased in most countries in the 1990s, but decreased in Canada after 1992.

More health professionals would reduce stress overall. Many doctors and nurses work long hours and often suffer because of it: an average of 8.4 percent of full-time nurses are off work because of an illness or disability on any given day, roughly twice as high as other healthcare workers, and many doctors in rural areas burn out because they don't have enough colleagues to share long hours on call. If there were more doctors and nurses overall, the lifestyle might be easier and more attractive.

More workers would allow doctors and nurses to work the hours they want. Many doctors and nurses work excessive hours. Hiring more doctors and nurses will allow these men and women to work more manageable, flexible hours. As the system stands, excessive illness is a significant problem: an average of 8.4 percent of full-time nurses don't work because of an illness or disability, roughly twice as high as other healthcare workers. Some of the reasons for this are greater psychological demand, overtime, and lower job satisfaction. Many doctors in rural areas have also burned out because of a lack of doctors to help cover long on-call hours.

Some strategies for increasing the numbers will also lead to better working conditions for nurses. In trying to attract new recruits and repatriate qualified but non-practicing nurses, we'd be trying to improve nurses' worklife. Issues like job security, workplace safety, support from colleagues, control over scheduling and recognition could be addressed in trying to make their workplace more attractive.

Arguments against

There is no cut-and-dried evidence that increasing the number of doctors and nurses is the way to meet Canadians' health needs. Many studies that proclaim staff shortages point to a decline in the supply of nurses and doctors, instead of figuring out how many we need based on how healthy Canadians are. The system's ability to treat the population doesn't hinge only on how many workers there are.

It would be expensive. In a system that is already strained to meet costs, we can't easily afford new physicians and nurses.

Increasing the numbers won't solve distribution problems. Putting more people through school doesn't necessarily translate into more staff in under-serviced areas. Money needs to be spent on education and training that would encourage people to work in rural and remote areas.

New models of care would allow us to meet current needs without greatly increasing the number of people we train. For instance, when nurse practitioners work with family physicians, the practice can take on from 25 to 50 percent more patients; it's estimated that between 20 and 32 percent of general practitioner jobs could become nurse practitioner jobs. Similarly, licensed practical nurses, nursing assistants and various therapists and technicians could do parts of registered nurses' jobs.

Physician "brain drain" isn't as bad as we think. The number of doctors we are losing to other countries has been decreasing in recent years, especially when the number of Canadian doctors returning to Canada is factored in. In 2000, the net loss was 164, down from a high of 508 in 1996. Added to that, we gained 335 doctors as landed immigrants.

Survey questions

Please refer to page 11 for the survey questions for this section.

II Changing job descriptions

There has been little change over the years in how care is given and by whom. Senator Wilbert Keon — CEO of the Ottawa Heart Institute — once said that we have too many doctors doing what nurses should be doing. We have too many nurses doing what nursing assistants should be doing. We have too many technicians doing what clerks and administrators should be doing.

There are more than 30 "regulated" health professions in Canada, ranging from physicians and nurses to massage therapists and chiropodists. Each specializes in a certain area, although skills and roles vary across the country and often overlap. A nurse, chiropractor and physical therapist may each work with patients who have bad backs; psychologists do some of the work of psychiatrists. Nurse practitioners — who have extra training to diagnose minor illnesses, monitor stable chronic illnesses, request selected tests and write certain prescriptions — can free up doctors to provide care to more seriously ill patients.

So why aren't we making sure that people are being used as cost-effectively as possible, that doctors, for example, don't spend so much of their time doing what nurse practitioners can do? Partly it's because there's been little work done on how to mix and match skills effectively; no one has defined when it would be better to let a nurse practitioner treat a patient with a bad back or to have a psychologist rather than a psychiatrist care for someone who is mentally ill.

There are also legal problems. "Regulated" healthcare workers operate under licence, and the nature of licensing is to restrict certain professions to doing certain kinds of work. Tensions within and among healthcare professions about who does what — few want to give up tasks that have been almost exclusively theirs — have slowed change, as have long-standing union contracts that restrict who can do what.

Quebec has been the most successful of all the provinces in encouraging the professions to work together to give primary healthcare. Twenty percent of its family physicians work in community health centres (called CLSCs) that have many different health professionals and offer a range of health services.

Course of Action: Governments and healthcare employers should change laws, regulations and employment agreements to better match healthcare practitioners' jobs to their training.

Changing job parameters and the laws around them can be done: Quebec has proposed legislation that would affect up to 120,000 workers in 11 health service professions, including nurses, auxiliary nurses, pharmacists, physiotherapists and radiology technicians. Among other redefining of roles, it would allow doctors and nurses to share more duties in areas such as surgery, cardiology, and intensive care for newborns. The outcome looks promising — the Quebec College of Physicians has given the nod to the bill.

The most common focus for this kind of reform is primary care — the everyday healthcare now usually given by individual doctors in private offices. By sharing their tasks with a whole range of health professionals, from nurses to dieticians to psychologists, family doctors could become members of networks of care operating 24 hours a day, which would reduce the strain on them as individuals and likely on the overall system as well — there would be less demand on emergency rooms, for example, if a nurse practitioner were on call in the patient's regular clinic.

But it wouldn't have to stop there. Throughout the healthcare system, job descriptions would be constructed around what a professional can do as opposed to what they are allowed to do. Skill sets could be matched to practices and people would be more flexible in the kind of work they are able to

do. Some people could be cross-trained to perform procedures and functions in two or more disciplines. An example of these multi-skilled workers is an X-ray technician who is also trained to do ultrasounds.

The Family Health Network practice model in Ontario and the CLSC model in Quebec could be used to encourage doctors to join other doctors and health professionals in teams to provide more accessible care to their patients with an emphasis on prevention and comprehensive care.

Arguments for

Allowing more people to perform a wider range of services will improve access to healthcare and help solve staff shortages. Having healthcare personnel do a wider range of tasks should mean it's easier to ensure all necessary services can be provided, especially in under-served areas.

Changing regulations to allow nurse practitioners to use all their skills could increase cost-effectiveness in the system. Because doctors are the highest paid of all healthcare workers, having them perform tasks that nurse practitioners (or others) could do is one of the least efficient uses of money. Studies show that patients are more satisfied with consultations with nurse practitioners than doctors, and that seeing a doctor (instead of a nurse practitioner) doesn't lead to better health.

Provinces are already starting to move in this direction. Ontario, British Columbia and Alberta have all changed their laws so that only certain tasks require licences, not entire jobs. This means that a wider variety of people can do particular tasks (in some cases, the licence holder only has to supervise someone doing that task).

Arguments against

Healthcare professionals worry it will undermine their work. Healthcare workers are dedicated and well-educated professionals, and many resist suggestions their work could be done as well by others. Many professional associations, indeed, have been gradually increasing the educational credentials needed to practice, rather than trying to broaden them. Doctors' associations don't want to see the need for physicians reduced and similarly, registered nurses try to limit the tasks their less-trained colleagues are allowed to perform.

Doctors could lose money. If doctors continue to be paid according to how many patients they treat, and the simpler, faster cases are taken on by nurse practitioners, then doctors could lose money because they will spend most of their time on longer, more complicated cases.

If we end up with two or three different professions performing the same work, they may all expect to receive the same pay. This could lead to higher costs.

To re-organize the workforce in this way would actually require an investment in re-training. Nurse practitioners, for example, have education over and above the basic nursing degree; broadening the scope of what other professionals are trained to do might cost a lot of money.

Survey questions

Please refer to page 11 for the survey questions for this section.

III Distribution of healthcare workers

Despite the Canada Health Act's promise of universal accessibility, healthcare is actually very unevenly distributed across the country. Physicians, recruited and trained in cities, don't want to work in small towns; expensive equipment and facilities are concentrated in high-population urban areas and other services are spread thinly in rural and remote parts of the country. Canada must find a way to ensure more even distribution of healthcare providers from province to province, and within each province, across urban, rural, and remote areas.

Course of Action: Governments should use financial incentives to better distribute healthcare practitioners between and within provinces.

The ratio of doctors and nurses to the population varies widely across the country. In 2000, there was an average of 94 family doctors for every 100,000 Canadians, but that number doesn't come close to giving a realistic picture — in some places there are more than 140 doctors per 100,000 Canadians, while in others there are less than 70 per 100,000. Another statistic may illustrate the problem a little better: one-third of Canadians live in rural areas, but only 18.6 percent of family doctors and 3.8 percent of specialists work in them.

For nurses, there was an overall average of 754 nurses per 100,000 Canadians in 2000 (down from 803 in 1994), with a low of 333 in Nunavut, and a high of 1027 in the Northwest Territories. Distribution is uneven within provinces as well. And there's an ongoing problem of poaching — big hospitals in big provinces can often offer salaries and bonuses that, combined with the appeal of living in a big city surrounded by high-tech equipment and lots of colleagues, will lure doctors and nurses alike away from rural practice.

Canada could set up a nation-wide healthcare human resources strategy with national salary scales, adjusted for the higher cost of living in certain areas. This could reduce competition between the provinces for healthcare staff and help distribute professionals more equally across the country.

Financial incentives — which could be offered to practitioners before and after graduation — might also improve distribution. They can include subsidized incomes or guaranteed minimum income contracts; special salaries, grants or bonuses tied to service in remote areas; travel allowances; money to help set up offices; paid vacations and extra pay for living in isolated places. A mix of incentives would have to be used, depending on where we need healthcare practitioners to go — either to rural and remote areas, or to an under-served province. It's also possible, of course, to use money to discourage certain behaviour — in 1982, Quebec started paying doctors 30 percent less if they worked in an urban area in the three years after they finished medical school.

Arguments for

Financial incentives have worked in some circumstances. Alberta is drawing nurses and doctors from Saskatchewan and Manitoba by paying them more. The National Health Service Corps in the U.S, showed that financial incentives work in the recruitment of physicians to under-served areas — about 45 percent of the doctors who received financial incentives from the National Health Service Corps worked in under-served areas, compared to 13 percent of those who did not receive financial incentives.

A national strategy would help eliminate inter-provincial "poaching" of staff. If everyone was paid the same, poorer provinces would not have as hard a time competing for health professionals.

Financial incentives aimed at students who grew up in rural areas should work. Research shows that growing up in a rural community has great influence on whether a doctor chooses to practice in a rural community, but the number of medical students from rural areas is less than half what it should be as a proportion of the overall population. The situation is similar with aboriginal students. While as many as 50 percent of Canada's aboriginal doctors are involved in the chronically short-staffed area of aboriginal healthcare they make up less than one-sixth of what would be expected in the population of medical schools.

In some cases, putting physicians on salary could increase the number of doctors willing to practice in rural and remote areas. In areas where there are very few patients, changing how a physician is paid — from fees, where they are paid a set amount for every service provided, to a salary — can allow more than one doctor to serve a small community, relieving the burden of on-call work and increasing the sense of professional support.

Arguments against

Financial factors are a low priority for most doctors when they decide where to locate. Background, family considerations, professional support, workload and quality of life are all more important to doctors when they are looking for work.

Financial incentives have been used for decades and we still have a major distribution problem. In Ontario, grants and bursaries offered to nurses provided only short-term fixes to staffing problems. High-quality work environments have been shown to be more successful in attracting and holding onto staff than money.

Retention, not recruitment, is the real problem. The Ontario Underserviced Area Program offered extra money to doctors to work in isolated areas, but they usually left after the grant ran out. Workloads and inferior working conditions are the reasons doctors give for leaving rural areas, not the pay. We need strategies to improve life at work and away from it if we want people to work in rural areas.

Financial incentives will put poorer provinces at a disadvantage. Unless the incentives come from a national fund, poorer provinces will be unable to keep up with the financial incentives that richer provinces can offer.

Investment in telemedicine may be more effective in improving access to medical care in rural and remote areas. It can't replace personnel, but most research to date shows it to be effective for purposes of diagnosis, some treatment, consultation, and the sharing of health information. It would connect isolated communities to much of the expertise and information available in other areas.

Survey questions

Please refer to page 12 for the survey questions for this section.

Acknowledgements

This document was produced by the Canadian Health Services Research Foundation, in partnership with the Commission on the Future of Health Care in Canada. The topics and courses of action reflect key issues raised frequently in the Commission's consultations to date, for which the Foundation was able to find relevant research evidence to help inform the debate.

This document has been reviewed by the following experts for accuracy and fairness, but final responsibility lies with the Canadian Health Services Research Foundation:

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A complete bibliography of the research used to prepare these documents can be found at www.healthcarecommission.ca.

SURVEY INSTRUCTIONS

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For information:
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Thank you

Survey Questions

Please indicate your opinion on each of the following questions by checking the appropriate response.

Increasing the number of doctors and nurses

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. Healthcare in Canada would improve if governments invested in increasing the number of doctors and nurses working in Canada.	❑	❑	❑	❑	❑
2. Governments should increase healthcare spending to increase the number of doctors and nurses working in Canada.	❑	❑	❑	❑	❑
3. It's more important to make better use of existing health professionals than to increase the number of new health professionals in Canada.	❑	❑	❑	❑	❑
4. Improving working conditions for health professionals is the most important way to keep them in Canada.	❑	❑	❑	❑	❑

Changing job descriptions

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. Healthcare in Canada would improve if governments and healthcare employers changed laws, regulations and employment agreements to better match healthcare practitioners' jobs to their training.	❑	❑	❑	❑	❑
2. Healthcare professionals should be allowed to provide all the care their training has prepared them to provide.	❑	❑	❑	❑	❑
3. I would be happy to receive care from a nurse instead of a doctor if that nurse has been fully trained to deal with my care.	❑	❑	❑	❑	❑.
4. I would like my family doctor to work as part of a group practice where I would be taken care of by a range of health professionals, and have greater after-hours access to services.	❑	❑	❑	❑	❑

Distribution of healthcare workers

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. Healthcare in Canada would improve if governments used financial incentives to better distribute healthcare practitioners between and within provinces.	❑	❑	❑	❑	❑
2. Governments should increase healthcare spending to provide financial incentives to better distribute healthcare practitioners between and within provinces.	❑	❑	❑	❑	❑
3. Canada should set national salary scales for health professionals, to reduce the competition between provinces for health professionals.	❑	❑	❑	❑	❑
4. Canada should focus on improving some of the factors that make working in rural and remote areas more difficult and less appealing to health practitioners.	❑	❑	❑	❑	❑

Analysis Information

Please complete the following information for analysis purposes. Thank you.

Gender: ❑ Male ❑ Female

Age: ❑ under 18 ❑ 19-29 ❑ 30-49 ❑ 50-65 ❑ over 65

Province or Territory in which you reside: _____

Continued ...

Your annual household income from all sources before taxes is: (Optional)

Choose one:

❑ Less than $20000

❑ $20000 to $39999

❑ $40000 to $59000

❑ $60000 to $79000

❑ $80000 to $99000

❑ More than $100K

The highest level of schooling you have completed is: (Optional)

Choose one:

❑ Elementary School or less

❑ Secondary School

❑ Community College/CEGEP/Trade School

❑ Prof./Trade Certification

❑ Bachelor Degree

❑ Graduate Degree

Are you a healthcare professional? (Optional)

❑ Yes ❑ No

Approximately how many times in the last year have you personally used the healthcare system? (eg. seen a doctor or specialist, spent time in the hospital, received care in a hospital emergency room, etc.) (Optional)

Choose one:

❑ 0-3

❑ 4-6

❑ 7-9

❑ More than 10

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