



# Toward a Pan-Canadian Planning Framework for Health Human Resources

A Green Paper

June 2005



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**ASSOCIATION DES INFIRMIÈRES ET INFIRMIERS DU CANADA**

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# **Core Principles and Strategic Directions for a Pan-Canadian Health Human Resources Plan**

## **Executive Summary**

While Medicare has enjoyed considerable success as a pan-Canadian initiative since the 1960s, the same cannot be said for the planning of Canada's health workforce. To the degree that planning has occurred, it has been done largely within provinces and territories, and for various health disciplines in isolation of each other.

There is widespread agreement that if we are going to have a strategic plan for the health workforce, it must be integrated across the provinces/territories and across the various health disciplines.

Internationally, the U.K. National Health Service and Australia's Health Ministers have undertaken recent initiatives aimed at adopting a strategic human resource planning approach in the health sector.

This document sets out for discussion 10 core principles and associated strategic directions that might underpin such an approach in Canada under the themes of patient-centred care, planning and career life cycle.

### **A. PATIENT-CENTRED CARE**

- 1. Needs-Based Planning** – *Planners need to adopt a needs-based approach that anticipates the current and emerging health needs of the population that are determined by demographic, epidemiological, cultural and geographic factors.*

### **Strategic Directions**

- i. In-depth analysis of population surveys and epidemiologic data*
- ii. Benchmarking based on regional variation*
- iii. Review of specialty mix within and between disciplines*
- 2. Collaboration Among Disciplines** - *The health professions need to collaborate by communicating with one another and coordinating their efforts in the best interests of the patient.*

### **Strategic Directions**

- i. Promote Inter-professional education*
- ii. Address Liability Concerns*

iii. *Develop funding models that support collaboration*

B. PLANNING

3. ***The Health Workforce is a National Resource*** - *It is desirable to promote a high level of opportunity for mobility within and between provinces/territories for Canadian health professions in education/training and practice across the career lifecycle.*

Strategic Directions

i. *Promote national standards for portable eligibility for licensure*

ii. *Recognize regional centres of excellence*

iii. *Preserve and promote a national system of education and training*

4. ***Greater Self-Sufficiency-*** *Canada must strive for greater self-sufficiency in the education and training of health professionals.*

Strategic Directions

i. *Improved Medium to Longer-Term Supply Projection Models*

ii. *Sufficient Opportunities for Canadians to Train for Health Professional Careers in Canada*

iii. *Integration of International Graduates who are permanent residents or citizens of Canada into practice*

5. ***Recognize the Global Environment*** – *It must be recognized that health professionals are working in an increasingly global world in terms of the exchange of scientific information, mutual recognition of qualifications between countries and the movement of people.*

Strategic Directions

i. *Promote Memoranda of Understanding (MOUs) with Developing Countries to Discourage Unethical Systematic Recruitment*

ii. *Consider the impact of technology on the potential to deliver services remotely and to exchange health services across borders*

iii. *Maintain high standards of education, and teaching*

6. ***Inclusive Policy Planning and Decision-Making Processes*** - Policy planning and decision-making in the area of health human resources must include representation from all stakeholders involved including governments, regional health authorities, educational and regulatory authorities and practising professionals.

Strategic Directions

- i. *Establish a Canadian Coordinating Office for Health Human Resources*
- ii. *Provide for exchanges between the provider community and federal/provincial/territorial advisory committees*
- iii. *Promote Provider Representation at Regional and Institutional Governance Bodies*

C. **CAREER LIFECYCLE**

7. ***Competitive Human Resource Policies*** - Health professionals should be afforded supportive working environments that are designed to attract and retain them through comprehensive approaches that address their professional and personal needs.

Strategic Directions

- i. *Recruitment approaches that address both professional and personal factors*
  - ii. *Comprehensive Retention Approaches*
  - iii. *Research to determine the potential for repatriation*
8. ***Healthy Workplaces*** – Health care administrators and decision-makers must recognize the importance of healthy workplaces and collaborate with health care providers to implement strategies to support their health and safety.

Strategic Directions

- i. *Best Practice Approaches*
  - ii. *Educational Programs*
  - iii. *Promote culture shift to encourage help-seeking behaviour*
9. ***Balance Between Personal and Professional Life*** – Planners must take into account the expressed desire among the new generation of health professionals for a balance between their professional and personal lives.

## Strategic Directions

- i. *Build into Educational Curricula*
  - ii. *Learn from international experience*
  - iii. *Factor work:life balance into supply planning*
- 10. *Life Long Learning*** - *Health professionals must have access to the resources they need to keep abreast of advances in scientific knowledge and to acquire new skills and they should have opportunities to apply their skills to new challenges over the course of their careers.*

## Strategic Directions

- i. *Opportunities for Re-entry and Advanced Training*
- ii. *Career development/progression*
- iii. *Continuing Professional Development*

## **SUMMARY**

The foregoing is intended to set out, for discussion and critical feedback, the basic core principles and directions that would underpin a proactive strategy to applying a strategic human resource planning perspective to the Canadian health workforce. This can only be successful if it is integrated across the provinces and territories and the various health professional disciplines.

Moreover such an approach cannot be achieved by governments alone, particularly when one considers the many policy levers across the career lifecycle, as enumerated by Barer and Stoddart. It is essential to have early meaningful and ongoing engagement of health professionals in the planning process.

A next step would be to identify operational targets and indicators for the strategic directions enumerated above and to identify the appropriate policy levers and stakeholders responsible for them.

## **Objective**

The objective of this document is to set out for discussion purposes the core principles and strategic directions that would underpin a pan-Canadian plan for achieving a sustainable health workforce.

## **Introduction**

While the Canadian Constitution assigns the responsibility for the delivery of health care to the provinces/territories, since its introduction in the 1960s, Medicare has sought to provide universal access to Canadians to hospital and medical services on uniform terms and conditions as set out in the Canada Health Act. Notwithstanding recent concerns about timely access and the limited breadth of Medicare, this is an example of a pan-Canadian approach that continues to be highly valued by Canadians.

In contrast, planning for the workforce that delivers health services has been left to individual provinces and territories. Planning efforts to date have been characterized by two key trends.

- the focus has tended to be exclusively on supply-side planning which views health professionals as costs to the economy
- planning approaches have treated health professional groups in isolation of each other.

The overall policy that has resulted from this approach has been one of “beggar thy neighbour” between provinces and territories with continued reliance on internationally educated health professionals to meet any shortfall. As we move into an era with growing global shortages of physicians, nurses and other health professionals, this approach will not be sustainable.

The seriousness of Canada’s health workforce situation is highlighted by a comparison to other countries. In 2002 Canada ranked 24<sup>th</sup> among the 30 member countries of the Organization for Economic Cooperation and Development (OECD) in the number of practising physicians per 1,000 population at 2.1 – almost one-third below the average of 2.9.<sup>1</sup> In the case of nursing, a 2004 OECD study reported that Canada had the highest relative nursing shortage of the 6 countries examined at 6.9% of the present workforce.<sup>2</sup>

## **A Strategic Plan for Health Human Resources**

In the business world, a strategic plan is the framework that aligns the structure and resources of an organization with its mission, vision, values and long-term goals and objectives.

In the Canadian context, with a health care system that is 70% publicly funded and with all key components regulated, the concept of a strategic plan is applicable to the health workforce.

The Mission of the Canadian health workforce is to provide preventative, curative and palliative services that help Canadians and their communities maintain and improve their health.

This might be realized in a Vision whereby all Canadians have access to the right service, by the right provider at the right time, in reasonable proximity to where they live.

Many organizations today are reflecting on the core values that underlie their businesses. Looking across the range of health professionals in Canada today there are at least three basic core values that cut across all disciplines:

- a sense of compassion or caring about the patient and his or her needs;
- a focus on excellence and continued improvement in clinical practice; and
- accountability to the patient and the public, most typically through regulatory mechanisms .

The long-term goal of the health workforce is to realize the vision.

Although many national, provincial and territorial commissions and task forces have studied the Canadian health care system since the 1980s, a pan-Canadian health human resource strategic planning framework remains an elusive target.

Internationally there has been progress in securing policy commitments at a national level to support plans for the future health workforce. In 2000 the National Health Service in the United Kingdom adopted 10 core principles which included the following:

***The NHS will support and value its staff***

*The strength of the NHS lies in its staff, whose skills, expertise and dedication underpin all that it does. They have the right to be treated with respect and dignity. The NHS will continue to support, recognize, reward and invest in individuals and organizations, providing opportunities for individual staff to progress in their careers and encouraging education, training and personal development. Professionals and organizations will have opportunities and responsibilities to exercise their judgement within the context of nationally agreed policies and standards.*<sup>3</sup>

In April 2004, the Australian Health Ministers' Conference adopted a National Health Workforce Strategic Framework that contains a vision, seven guiding principles and three or four strategic directions to support each principle.<sup>4</sup> This framework is the inspiration for the 10 core principles and strategic directions for Canada that are set out below:

## Core Principles and Strategic Directions

The principles are organized under three key headings:

- A. Patient-centred care
  - needs-based planning
  - collaboration among disciplines
- B. Pan-Canadian planning
  - the health workforce a national resource
  - greater self-sufficiency
  - recognize the global environment
  - inclusive policy planning and decision-making processes
- C. Career lifecycle
  - competitive human resource policies
  - healthy work places
  - balance between personal and professional life
  - life long learning

### A. *PATIENT-CENTRED CARE*

In its 2005 report *Preparing a health care workforce for the 21<sup>st</sup> century: the challenge of chronic conditions* the World Health Organization (WHO) has identified patient-centred care as one of five core competencies, and it has set out eight characteristics for it.<sup>5</sup> The intent of patient-centred care is to recognize and support the role of the informed patient in managing their health conditions. More generally, at a population/system level patient-centred care means focusing on population health needs from a demand-side rather than a supply-side perspective.

1. ***Needs-Based Planning*** – *Planners need to adopt a needs-based approach that anticipates the current and emerging health needs of the population that are determined by demographic, epidemiological, cultural and geographic factors.*

Most health human resource planning initiatives to date have been based on the supply side. This has been a function of the limitations of available data, and a preoccupation with budgets.

### Strategic Directions

- i. *In-depth analysis of population surveys and epidemiologic data.* In contrast to the past decades when the only sources of health data were vital statistics (cause of death) and administrative records (discharge abstracts), there is now a wealth of population-based survey data that can be used to examine the relationship between socio-demographic factors, lifestyle and health care utilization. For



example, Statistics Canada's 2003 Canadian Community Health Survey collected data from more than 130,000 respondents aged 12 or older, across the provinces and territories.<sup>6</sup> There is considerable potential in this and other surveys for estimating health needs in relation to the prevalence of health conditions in the population. The value of such analyses can be greatly enhanced by exploiting the potential for longitudinal research through linkage with administrative data. These data sources can be combined with methodological approaches such as the "economic burden of disease" model to highlight diseases such as mental illness and musculoskeletal conditions that attract less attention than more fatal conditions such as heart disease and cancer.

One method of operationalizing this approach that has been proposed is "access modeling" whereby time-based standards for consultations and procedures can be used to assess the imbalance between the expected volume of service required for certain conditions and the available supply of health human resources.

- ii. *Benchmarking based on regional variation* – To this day, supply planning in the case of physicians and nurses continues to be based on crude indicators such as physician:population ratios and nurse:patient ratios that are aggregated at fairly high levels. Such indicators are justifiably criticized as not reflective of the functional skill profiles and variable productivity of sub-aggregated levels. There is little doubt, however, that insight could be gained from benchmarking that could be carried out using the small area variation approach pioneered by Dr. John Wennberg at the Dartmouth Medical School in Massachusetts.<sup>7</sup> Although some related work has been carried out in jurisdictions such as Quebec and Manitoba, it has not been widely shared to the point where it has gathered any momentum that might lead to a strategy for the application of benchmarking to planning.
- iii. *Review of specialty mix within and between disciplines* – Over the course of the 20<sup>th</sup> century there has been considerable specialization and sub-specialization in many health disciplines. Probably the major driving force behind this specialization has been the tremendous growth of scientific information, and the response has been to specialize to achieve mastery of and advance knowledge in specific areas.

Recent federal and provincial reports have highlighted the need to address the underutilization of professional skills and knowledge and to move toward optimizing the utilization of all members of the multidisciplinary team. It is necessary to understand the uniqueness and overlap in scope of practice, as well as the context of practice, to design work in a way that best utilizes professional knowledge and skills, while maintaining and improving provider satisfaction and patient outcomes.

The Canadian Nurses Association in collaboration with the Canadian Practical Nurses Association, Canadian Council for Practical Nurse Regulators and the Registered Psychiatric Nurses of Canada recently published an Evaluation Framework to Determine the Impact of Nursing Staff Mix Decisions (2005).<sup>8</sup> The

purpose of the framework is to enable employers to determine how effectively they are using their nursing resources.

At the present time the following questions are being asked:

- is generalism being threatened by specialization?
- does specialty mix within and between health disciplines correspond to the health needs of the population?

2. ***Collaboration Among Disciplines: The health professions need to collaborate by communicating with one another and coordinating their efforts in the best interests of the patient.***

In its 2000 report *Crossing the Quality Chasm: A New Health System for the 21<sup>st</sup> Century*, the Institute of Medicine set out 10 “new rules to redesign and improve care”. Number 10 on this list is “Cooperation among clinicians”. “Clinicians and institutions should actively collaborate and communicate to ensure an appropriate exchange of information and coordination of care”.<sup>9</sup> Similarly the WHO has included “partnering” – with patients, other providers and communities as one of the five core competencies for the future.

### Strategic Directions

- Promote Inter-professional education* – To this day, health professionals continue to be educated and trained largely in isolation of each other. This approach does not promote an understanding among the health disciplines about the contribution that each makes to quality patient care. Increased efforts to promote inter-professional education would increase the awareness of other disciplines and would also pave the way for increased multidisciplinary teamwork in the future.
- Address Liability Concerns* – In an era of increased litigation, liability concerns are a potentially significant barrier to increased collaboration. The Canadian Medical Protective Association and Canadian Nurses Protective Association have recently adopted a joint statement that sets out seven steps to help decrease the risks of collaborative practice. These steps cover the following issues:
  - the need for each health professional to have their own appropriate and adequate professional liability protection and/or insurance coverage;
  - the need to confirm that other members of the collaborative health care team are similarly covered;
  - the need for adequate professional advice on insurance coverage and compliance with its terms; and
  - adequate coverage to address the reporting period over which claims can be made.<sup>10</sup>

Given that tort reform appears unlikely in the foreseeable future, this approach will likely need to be followed by other health disciplines.

- iii. *Develop funding models that support collaboration* - Probably the biggest funding-related issue that might impede collaborative practice, particularly in the community setting, is the public:private divide that is defined by the Canada Health Act. While it is estimated that some 98% of physician services are publicly funded; and more than 90% of all services provided in hospitals, the Canadian Institute for Health Information estimates that just 8% of the services of other health professionals were publicly-funded in 2004.<sup>11</sup> Given that the private share of total health expenditure has remained constant at about 30% for the past decade, this appears unlikely to undergo a significant shift in the near future. Getting beyond this barrier will require innovative arrangements between governments, third-party insurers, providers and patients.

## B. PAN-CANADIAN PLANNING

Undoubtedly the biggest challenge to adopting a pan-Canadian approach to health human resource planning is the fact that the provinces and territories have primary responsibility for education and delivery of health services (with the exception of Aboriginal health services provided by the federal government). Over time a series of provincial/territorial standards for educational credentials and licensure have evolved. The capability of training health professionals has varied widely among the provinces and territories, although the federal 1966 Health Resources Fund Act provided \$500 million over 15 years to redress this in significant measure.<sup>12</sup>

3. *The Health Workforce is a National Resource* - It is desirable to promote a high level of opportunity for mobility within and between provinces/territories for Canadian health professions in education/training and practice across the career lifecycle.

Although the provinces and territories provide similar high standards of education and training, mobility is often raised as an issue from the perspectives of graduate retention vis á vis provincial/territorial educational investment, critical mass to support educational programs and portable eligibility for licensure.

### Strategic Directions

- i. *Promote national standards for portable eligibility for licensure* - The Agreement on Internal Trade (AIT), signed by the provinces and territories in 1994, was intended to promote the movement of goods, services and people (labour) across the country. In the area of labour mobility the AIT was intended to enable any worker qualified for an occupation in the territory of a Party to be granted access to employment opportunities in that occupation in the territory of any other Party. Toward that end, each signatory to the AIT gave an undertaking to “mutually

recognize the occupation qualifications of workers of any other Party and to reconcile differences in occupational standards”.<sup>13</sup>

Just over 10 years after the AIT was signed it is not clear how the health professions measure up to its intent. For the foreseeable future, the “art of the possible” will continue to be national standards for portable eligibility for licensure, with the possibility of national credential verification mechanisms that could expedite cross-boarder licensure.

- ii. *Recognize regional centres of excellence* – The Canadian population is dispersed over the second largest country in the world with a few large population centres and many small ones. It is simply not possible to offer all services in all locations. Moreover, the quality literature of the 1990s and since has repeatedly demonstrated that health outcomes are better when procedures are carried out with sufficient frequency. This was acknowledged by the provincial/territorial premiers in January 2002 when they agreed “to share human resources and equipment by developing Sites of Excellence in various fields such as pediatric cardiac surgery and gamma knife surgery”.<sup>14</sup> Clearly such a strategic direction needs to encompass the training dimension as well as clinical service.
- iii. *Preserve and promote a national system of education and training* – Historically, Canada has relied on the national character of its education and training system, particularly for those jurisdictions that have not had training programs. Canada’s health professionals have surely benefited from educational and training experiences in different jurisdictions.

In the case of medicine the national character of the education/training system may be seen in the following table which looks at the location of undergraduate medical education and postgraduate training compared to location of practice for Canadian medical graduates exiting post-MD training in 2003. Nationally, three out of 10 graduates had taken some or all of their medical education/training outside the region where they were practising.

Table 1  
Physicians Exiting Post-M.D. Training at Completion in 2003  
Graduates of Canadian Medical Schools  
Practice Location in 2005  
By  
Proportion Taking M.D. Degree and/or Post-M.D. Training in Region of Practice

Practice Location in 2005	Post-M.D. Training/M.D. Degree in Practice Region?								Total	
	M.D. + Post-M.D.		M.D. Only		Post-M.D. Only		Neither M.D./Post-M.D.		Count	Row %
	Count	Row %	Count	Row %	Count	Row %	Count	Row %		
Atlantic	51	44.0%	18	15.5%	15	12.9%	32	27.6%	116	100.0%
Quebec	331	91.9%	15	4.2%	10	2.8%	4	1.1%	360	100.0%
Ontario	364	72.4%	29	5.8%	79	15.7%	31	6.2%	503	100.0%
Prairies	145	62.2%	31	13.3%	37	15.9%	20	8.6%	233	100.0%
B.C.	52	32.9%	26	16.5%	44	27.8%	36	22.8%	158	100.0%
<b>Total</b>	<b>943</b>	<b>68.8%</b>	<b>119</b>	<b>8.7%</b>	<b>185</b>	<b>13.5%</b>	<b>123</b>	<b>9.0%</b>	<b>1370</b>	<b>100.0%</b>

Source: Canadian Post-MD Registry

Similarly for registered nurses, the following table depicts the composition of the workforce in 2002 according to their place of graduation. More than one-quarter of the RN workforces in BC, AB and PEI received their initial nursing education from another province.<sup>15</sup>

**Table 2**

**Percentage Distribution of RN Workforce by Place of Graduation, 2002**

Province	% of Out of Province Graduates
PEI	27.8
NS	19.7
NB	13.1
ON	8.1
MB	10.7
SK	14.2
AB	27.6
BC	29.5
YT	92.6
NU	85.7
NT	80.3

Source: Canadian Institute for Health Information

4. *Greater Self-Sufficiency - Canada must strive for greater self-sufficiency in the education and training of health professionals.*

Canada continues to rely heavily on the recruitment of internationally educated health professionals. In the case of medicine, approximately one-third of the increase in physician supply each year is due to International Medical Graduates who are either recruited directly to practice or who have taken significant post-MD training in Canada. In nursing, the number of internationally educated nurses applying for licensure is increasing rapidly, almost tripling from 1999 to 2003.<sup>16</sup>

Strategic Directions

- i. *Improved Medium to Longer-Term Supply Projection Models* – At the present time there is a dearth of projection models for health professionals in the public domain. In the case of nursing, Eva Ryten (2002) has developed a projection model in collaboration with the Canadian Nurses Association that is projecting a shortage of 78,000 registered nurses by 2011 and 113,000 by 2016.<sup>17</sup> The Canadian Medical Association has developed the Physician Resource Evaluation Template (PRET). The original 2021 projection of the PRET in 1999 was a population:physician ratio of 718:1 compared to the 1999 level of 534:1. Since 1999, first-year medical enrolment has increased by some 600 places and the 2005 PRET projection for 2021 is 449:1.<sup>18</sup> It must be stressed that these models are simply projecting head-counts of active nurses and physicians. They do not take into account productivity, practice patterns or variances in specialty mix. There is a need for more documented projection models in the public domain to stimulate criticism and debate.
- ii. *Sufficient Opportunities for Canadians to Train for Health Professional Careers in Canada* - In the 1990s there were drastic cutbacks in nursing enrolment and a 10% cut in medical school enrolment. This followed a decade of already declining numbers where first year enrolment saw a reduction of over 5%. Overall, there was a 16% decrease from a high of 1887 first year medical students in 1980-81 to a low of 1577 in 1997-98.

In 2000 approximately 5,000 nurses graduated from Registered Nursing (RN) programs offered across the country. This is just over 55% of the 9,000 RNs graduated in Canada in 1989.<sup>19</sup> In medicine the number of MD degrees awarded dropped from a peak of 1,835 in 1985 to 1,537 in 2001.<sup>20</sup>

These levels are well below replacement level. It has been estimated that Canada needs to graduate at least 12,000 nursing students per year and for medicine a first year class size of 2,500 is considered the bare minimum level required to keep up with attrition and population growth.<sup>21</sup>

In international comparative perspective, Canada provides far fewer opportunities for young people to attend medical school than does England. In 2002 there were 6.5 places per 100,000 population in Canada compared to 12.2 in England.<sup>22</sup>

While there have been reversals in these declining enrolment trends since the 1990s, there is a need to thoroughly review the health professional education and training infrastructure to assess the capacity for further expansion of enrolment. Results from the national nursing sector study indicates that with additional resources 70% of RN schools could expand their enrollment by 25%.<sup>23</sup>

Increased positions in the educational system must be paired with enhancements and expansion of the infrastructure of academic health organizations. This will provide adequate physical capacity to cope with additional learners, sufficient faculty to educate them, and will operationally enhance interdisciplinary training. Of no less importance is the capability, once in practice, to work with the appropriate infrastructure support within an academic health organization and within the community. Both settings require access to tests, equipment, operating rooms, etc. to provide quality patient care.

At the same time that enrolment expands, there is a growing concern that rising tuition is resulting in onerous burdens on medical and nursing graduates and those of other health disciplines. This may limit access to health professional education to the most advantaged, and among those who do get in, debtload may influence both their choice of education and training and their practice location upon graduation.

- iii. *Integration of International Graduates who are permanent residents or citizens of Canada into practice* – Canada has benefited immensely from the contribution of International Medical Graduates and Internationally Educated Nurses (IMGs and IENs) and other internationally educated health professionals. Canada is an attractive destination for immigrants for a variety of reasons. A rate-limiting step to the integration of more IMGs and ING into clinical practice is the capacity of the training infrastructure to provide additional training so that they meet Canadian standards. In the case of medicine roughly 1/10<sup>th</sup> of those IMGs eligible to pursue post-MD training in Canada are able to obtain a training position each year. The availability of supplementary nursing education programs to assist internationally educated nurses to meet licensure requirements are too few in number, and vary significantly in their design and cost.<sup>24</sup> The federal government has committed \$75 million in the 2005 budget to accelerate and expand the assessment and integration of internationally-trained health professionals. It estimates this might result in the integration of up to 1,000 physicians, 800 nurses and 500 other health professionals.<sup>25</sup>

This will need to be coordinated with the output of Canadian educated and trained health professionals.

5. ***Recognize the Global Environment*** – *It must be recognized that health professionals are working in an increasingly global world in terms of the exchange of scientific information, mutual recognition of qualifications between countries and the movement of people.*

There are several features of the growing global environment that will have implications for the health professions. The first is the increasingly level playing field in terms of access to and exchange of scientific information that has resulted from the Internet and from developments in communications technology. The second is the proliferation of bilateral and multilateral agreements between countries that may involve mutual recognition of occupational standards and/or a harmonization of standards. Third, there is increased mobility of populations and health professionals that expands greatly on traditional migration patterns, which will also increase the requirement for culturally appropriate health care.

#### Strategic Directions

- i. *Promote Memoranda of Understanding (MOUs) with Developing Countries to Discourage Unethical Systematic Recruitment.* Like other developed countries, Canada continues to rely on the recruitment of IMGs and IENs. While this is for the most part “passive” recruitment that occurs through informal networks, Canada has been criticized for recruiting heavily from developing countries like South Africa that can ill afford to lose them.

One experiment that should be assessed is the 2003 MOU between the Government of South Africa and the Government of the U.K. that focuses on the reciprocal educational exchange of personnel.<sup>26</sup> Under this agreement, South African doctors and nurses will have the opportunity to work in the U.K. National Health Service (NHS) on various projects, during which time their positions will be kept open in South Africa. Similarly, NHS staff will be encouraged to take on assignments in South Africa. It is expected that this MOU will lead to a sharing of expertise in areas such as public health, professional regulation, workforce planning and public:private partnerships. It is not known if there has been an interim evaluation on how this is working, although South Africa has had an agreement with Cuba since 2001 and as of November 2004, almost 700 Cuban physicians and lecturers have worked in South Africa.<sup>27</sup>

- ii. *Consider the impact of technology on the potential to deliver services remotely and to exchange health services across borders.* There have been many successful demonstrations and pilot projects of telehealth technology in Canada, beginning with the pioneering work of Dr. Max House in Newfoundland. As the communications infrastructure continues to develop there will be a much greater reach of audio-visual technology to support remote diagnosis and treatment. This also raises the prospect of exchange of services across borders. In the case of diagnostic imaging, there are reports that already some Canadian clinics are having images analyzed in the United States. A recent report in the Washington



Post documented a U.S. hospital that has all its images taken during the night analyzed by a clinic in India, subject to review the next morning.<sup>28</sup>

In 1994 in a futuristic survey of health care, the Economist Magazine speculated on the prospect of inter-continental robotic surgery.<sup>29</sup> This has since been successfully tested by McMaster University's Centre for Minimal Access Surgery, and in August 2004, NASA astronauts tested tele-robotic surgery underwater, with a view to what may be required in space some day.<sup>30</sup>

Clearly there will be challenges of addressing liability and funding issues with these innovative approaches but there is little doubt that they will become much more commonplace, especially in the effort to enhance services to those in rural and remote areas of Canada.

- iii. *Maintain high standards of education, and teaching* - Canada has achieved some of the highest standards in the world for the education and training of health professionals. In a more global environment it will be a challenge to maintain these standards. For example, the Royal College of Physicians and Surgeons of Canada has incurred significant expense in assessing the training systems of several countries abroad to determine how they compare with Canadian programs. Also, in nursing this is evident in the fact that many internationally educated nurses do not meet the educational standards required for licensure in Canada.

**6. *Inclusive Policy Planning and Decision-Making Processes*** - Policy planning and decision-making in the area of health human resources must include representation from all stakeholders involved including governments, regional health authorities, educational and regulatory authorities and practising professionals.

Throughout the 1990s significant policy directions and decisions were adopted unilaterally by the federal/provincial/territorial (FPT) health Ministers on the advice of what is now called the FPT Advisory Committee on Health Delivery and Human Resources. One result of this approach is the shortage of nurses and physicians in Canada today.

### Strategic Directions

- i. *Establish a Canadian Coordinating Office for Health Human Resources* – One of the few successes in a pan-Canadian approach in the health field has been the establishment of the Canadian Coordinating Office for Health Technology Assessment (CCOHTA) in 1989.

Funded by the F/P/T governments, CCOHTA's initial mandate was to evaluate medical devices. Since that time however it has expanded into the area of the cost-effectiveness evaluation of pharmaceuticals and it has become trusted to the point that in September 2002 health Ministers (except Quebec) agreed that it

could take on the function at a Common Drug Review for the adoption of new drugs in provincial/territorial drug plans.<sup>31</sup> CCOHTA is now moving into the area of best practice. The success of this model might also be applicable in the health human resource planning.

- ii. *Provide for exchanges between the provider community and federal/provincial/territorial advisory committees* - While health professionals have been included on some of the advisory committees in the past – they have not generally been representative of the “coalface” of day-to-day clinical practice. A promising start has been the recent exchanges between ACHDHR and the sectoral studies that are underway in the health field. There is a need for regular interaction between committees and providers that go beyond fact-finding to the development of policy options.
- iii. *Promote Provider Representation at Regional and Institutional Governance Bodies* – One of the results of the regionalization of the 1990s is that it greatly reduced the number of health professionals having input on governance bodies, for example, through the elimination of individual hospital boards. In some cases health professionals were specifically prohibited from serving on regional boards. There is a need for an environmental scan across the country to compare and contrast the opportunities that health professionals have for meaningful input to governance bodies.

#### C. *CAREER LIFECYCLE*

The “career-lifecycle” in the health field was coined by Morris Barer and Greg Stoddart in their 1991 report *Toward Integrated Medical Resource Policies for Canada*.<sup>32</sup> They set out the medical career lifecycle as comprising the four stages of: undergraduate medical education, post-MD pre-licensure training, specialty training and clinical practice. They identified 49 policy options/levers across the continuum of these four stages. This concept has general applicability to other health professions.

- 7. *Competitive Human Resource Policies* - Health professionals should be afforded supportive working environments that are designed to attract and retain them through comprehensive approaches that address their professional and personal needs.

The health sector is catching on to what has been known in the business sector for years, namely that it is less costly to retain an existing customer than it is to recruit a new one. As communities and institutions have discovered recruitment is not only costly, but in today’s climate of shortage it is becoming increasingly difficult.

## Strategic Directions

i. *Recruitment approaches that address both professional and personal factors* – There is extensive literature on the recruitment of health professionals to rural and remote areas. This literature highlights the importance of both personal and professional factors. One of the key emerging issues in this area is the recognition of the need to recruit a family and not just the individual professional, who in likelihood is one-half of a professional couple. Some provinces/territories have hired recruiters, however probably greater efforts will be required on the part of regional health authorities, and local professional and business communities.

ii. *Comprehensive Retention Approaches* -Until recently the focus of efforts to attract and retain employees has been on recruitment. Using the rural and remote experience as an example, one of the key tools that has been employed is some type of “front-end loaded” recruitment bonus that might be paid out over the first few years of practice. More recently some jurisdictions have developed retention bonuses that reward long service, although it is too early to judge their success.

As in the case of recruitment, retention strategies must be broader than monetary incentives. An inventory of healthy workplace strategies prepared for the Canadian Nursing Advisory Committee (2002) identified strategies such as flexible work arrangements, family care initiatives, leave provisions, support for professional development and health and wellness programs to cite just a few.<sup>33</sup>

iii. *Research to determine the potential for repatriation* – There are thousands of Canadian-trained physicians, nurses and other health professionals working outside Canada, mainly in the United States, and many of whom have significant parts of their careers ahead of them. Research has shown that they leave Canada for a variety of professional reasons including secure jobs, research opportunities, influence of postgraduate training location as well as personal reasons. While a certain number return to Canada each year, the potential for recruiting larger numbers to return to practice in Canada has not been fully assessed and the exploratory research could be done for a modest investment.

8. *Healthy Workplaces* – *Health care administrators and decision-makers must recognize the importance of healthy workplaces and collaborate with health care providers to implement strategies to support their health and safety.*

Professional health organizations acknowledge the workplace as a key determinant of personal health. The Canadian Policy Research Networks wrote in 2002 “the connection is being made between the health of health workers and the ability of the system to meet patient needs”.<sup>34</sup> In addition, professional organizations are beginning to acknowledge the importance of a culture that permits practicing health professionals and those in training to find a level of personal and professional balance in order to better sustain their personal health. Compared to other workers, Canadians in health occupations are more likely to

miss work due to illness or disability and to be absent for more days, on average.<sup>35</sup> HHR planners and policy makers understand that our current health human resource crisis means our Canadian health care system cannot afford to lose a single provider from the workforce owing to health concerns. Increasingly research is confirming ill health to be a function of the broader context of the environments and conditions in which our health providers work.

## Strategic Directions

- i. *Best Practice Approaches* - It is no longer satisfactory to admonish individual health care providers to make healthy nutrition and exercise choices, we must create environments that make healthy choices the easy choice and enable providers to practice healthy behaviours. National organizations such as Health Canada, the Canadian Council of Health Service Accreditation, Canadian Health Services Research Foundation, and in the United States, the Joint Commission on the Accreditation of Health Organizations (JCAHO), are recognizing healthy workplaces and work organization as important health professional recruitment and retention strategies. The quality of nurses' professional practice environments has a direct correlation with job satisfaction, work production, recruitment and retention, the quality of care, and ultimately, client outcomes. This is articulated in the Canadian Nurses Association 2001 position statement on Quality Professionals Practice Environments.<sup>36</sup>

Medical student and resident organizations have been very successful in negotiating agreements that create more humane parameters and expectations for trainees which continue to balance the need for a satisfactory training experience against the service requirement expected of trainees. HHR planners must consider, however, the effect that these new policies have on human resource requirements and we must all be alert to the intergenerational tensions regarding workload sharing and other coverage issues.

- ii. *Educational Programs* - Education programming for nurses, physicians and other providers in the area of personal health and well-being is not a standard offering in most workplaces. Some employee assistance programs (EAP's) are offering a wider range of services, however in most instances these programs are not available to physicians. Furthermore, educational resources to promote balance, wellness and prevent ill health are not routinely available.

To address this gap, professional associations are developing curricula, seminars and others services to assist members. In the case of physicians, the CMA Centre for Physician Health and Well-being has developed a new national educational curriculum for physician leaders to raise the level of understanding around the issues and develop skills to create healthy work environments and better assist and respond to physician colleagues in need. This curriculum, although designed initially for physicians, is one that is broadly applicable to all health professionals and health care administrators.

- iii. *Promote culture shift to encourage help-seeking behaviour* - Often the culture amongst health providers and the environments in which they work and train is fraught with many barriers for maintaining wellness or seeking help once there is a problem. Strong, knowledgeable and driven health professionals have a tendency to self assess, deny illness and postpone intervention. In particular, the very competitive culture of medicine is encumbered by a stigma that equates ill health to weakness, discourages help-seeking behaviours and values physicians who continually put the needs of their patients, students and others ahead of their own. The knowledge and practice competencies to be developed through the CMA's new education curriculum for physician leaders will promote creation of a healthier culture in medicine, one that is not punitive, is more open and supportive, and where there is no stigma associated with asking for help. While similar lessons are applicable to other health provider groups, it is also possible that medicine can learn positive practices from other provider groups.
9. ***Balance Between Personal and Professional Life*** – *Planners must take into account the expressed desire among the new generation of health professionals for a balance between their professional and personal lives.*

Society is witnessing a generational sea-change in the priority that younger Canadians are placing on the balance between their personal and professional lives. This phenomenon is not unique to health care, however in professions where demand seems boundless and the human resources are scarce, it creates an additional challenge for human resource planners. Importantly however, this positive trend seems necessary in health professions that are battling low levels of morale, burn-out and disability.

#### Strategic Directions

- i. *Build into Educational Curricula- Educators* are becoming increasingly aware that educating for balance early is critical in helping students become the resilient health professional of tomorrow. Realizing that the competition for lecture time is a ubiquitous problem there is recognition by some that the integration of formal teaching on balance and coping must be accompanied by a positive cultural shift in the training environment and that mentors and positive role models are necessary. The new mentor for these students is the professional that has learned how to survive and thrive in an increasingly complex and demanding clinical environment.

However, we must not fool ourselves, medical and nursing training and practice is inherently difficult and stressful. The national medical school accreditation standard requires that support be present for trainees when required. We could take this further by incorporating a more systematic and holistic approach to physician wellness within the accreditation standard of Canadian Medical Schools and the roles and principles that define family medicine and specialty practice.

- ii. *Learn from international experience* - In the 2003 CMA Physician Resource Questionnaire, physicians reported working on average 53 hours per week, not including on call responsibilities. Many spend much more time than that, and most if not all might say that this extraordinary commitment is still not sufficient to meet the needs of patients. Mandatory overtime has been a common practice in the nursing workforce.

In 1993 the European Working Time Directive was adopted which sets out a maximum 48 hour working week (including overtime). In North America long hours have been raised as a quality of care issue. What might happen if maximum hours were mandated for health professionals in Canada?<sup>37</sup>

While such a move might be seen as very positive for the personal health of providers and ultimately patients, it would have significant implications for health resource planners who must now consider the impact on their human resource requirements.

In a document developed by the CMA Ad Hoc Policy Working Group on Physician Resources in 2004 it was projected that Canada would require 12,780 more physicians<sup>38</sup> immediately to meet the shortfall imposed by a 48 hour work week (excluding call). This number would jump even further if hours spent on call were included.

Regions of the United States and Australia have implemented legislated nurse patient ratios. This has had both positive and negative outcomes for providers, patients, and the health system. Careful review and evaluation of this policy direction is needed to determine its potential applicability in the Canadian context.

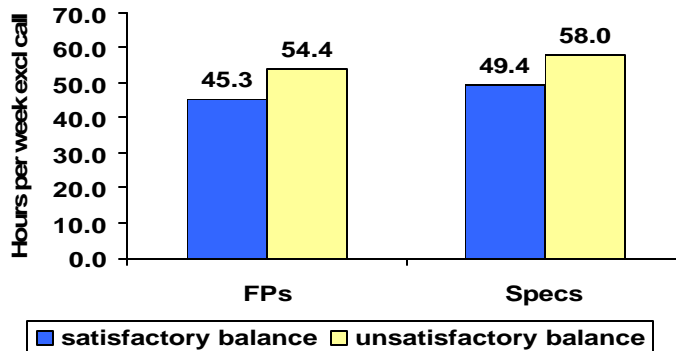
Similar impacts would be felt if recommendations to eliminate overtime were implemented. Nursing overtime is linked to negative patient and provider outcomes. In 2002, the total overtime hours (paid and unpaid) amounted to an estimated 300,000 hours per week, 15.7 million hours per year – or 8,643 full-time full-year positions.

The implications for Canadian health care will be enormous should such mandatory restrictions take effect. Planners are already witnessing a voluntary reduction in time spent at work by many professionals. We need to be prepared for both the positive and negative impact such mandatory restrictions will have on our human resource requirements.

- iii. *Factor work:life balance into supply planning* – We know that health professionals continue to work long hours. One approach to assessing a reasonable workload is to benchmark work week among populations that self-identify as being satisfied with a work:life balance. An example may be seen in the following graph that compares mean hours of work (excluding call) between physicians reporting satisfaction with the balance between their personal and

professional commitments versus those who are unsatisfied. In the case of GP/FPs those who are satisfied reported an average 45 hours per week compared to 54 hours per week among those who were not satisfied. Similar approaches may be applied to other health professional groups depending on data availability.

## Balance between personal and professional commitments



Source: 2004 National Physician Survey

Findings from the national nursing sector study indicate that nurses were less likely to be physically or mentally healthy when they worked involuntary overtime.<sup>39</sup> In addition, nurses who expected job instability and had experienced violence at work were also more likely to be dissatisfied with their current position. Nurses who were able to take coffee and meal breaks were more satisfied with their current job, as well as those who were provided educational opportunities by employers.

10. ***Life Long Learning*** - Health professionals must have access to the resources they need to keep abreast of advances in scientific knowledge and to acquire new skills and they should have opportunities to apply their skills to new challenges over the course of their careers.

The increased emphasis on life long learning stems from several factors. First, in general there is increased career mobility in society. Second, the focus on continuous quality improvement has underscored the need to keep up with the latest research and improvements in practice. Third, the proliferation of knowledge has stimulated interest in “knowledge translation” and “knowledge management”.

Strategic Directions

- i. *Opportunities for Re-entry and Advanced Training* - In most fields of occupational endeavour, the day is long gone when an employee would expect to start and finish their career either in the same organization or doing the same job. The health field is no different. The U.K. Department of Health recognized this some years ago with the launch of a National Health Service Careers service in 1999.

There are many educational offerings to develop managerial/administrative skills such as Master of Business Administration programs that are offered in executive format suitable to full-time employees and some are being developed specifically for the health field.

In the area of clinical retraining in the nursing field, a number of post RN specialty programs such as oncology, mental health, emergency and others have grown in their offerings. In addition, educational programs to support advanced practice roles such as clinical nurse specialist and nurse practitioner have been put in place over the past few years. In the field of medicine, however, the post-MD system has been flatlined since the early 1990s and there is very little opportunity for family physicians to train in a specialty or for specialists to train in a new specialty.

- ii. *Career development/progression* - This concept is being increasingly recognized in the health field. In a recent report that examines strategies for addressing nurse shortages in member countries of the Organization for Economic Cooperation and Development, Simoens et al<sup>40</sup> highlighted the role of career advancement as a retention strategy, citing examples of “clinical ladders”, single or multi-occupation job evaluation and individual or group performance pay. They also note the potential for leadership development of nurses. This needs to be a consideration in future organizational design of the Canadian healthcare system.
- iii. *Continuing Professional Development* – The growth of new knowledge in the health field has been well-documented. The Director of Kaiser-Permanete’s clinical portal has estimated that the amount of available medical knowledge doubles every seven years.<sup>41</sup> The U.S. National Library of Medicine adds between 1,500 – 3,500 references to its MEDLINE database daily from Tuesday through Saturday, more than 571,000 total were added during 2004.<sup>42</sup> The challenge of coping with this growing volume of information is giving rise to a new discipline of “knowledge translation”.

There needs to be considerable further investment to ensure that health professionals have access to the best current research available in a digestible format that can be readily put into practice. Moreover it is not sufficient for knowledge management tools and continuing professional development courses to be accessible. Health professionals need the time to avail themselves of them. Continuing professional development much be recognized as part of “the cost of doing business” in healthcare.



## **SUMMARY**

The foregoing is intended to set out, for discussion and critical feedback, the basic core principles and directions that would underpin a proactive strategy to applying a strategic human resource planning perspective to the Canadian health workforce. This can only be successful if it is integrated across the provinces and territories and the various health professional disciplines.

Moreover such an approach cannot be achieved by governments alone, particularly when one considers the many policy levers across the career lifecycle, as enumerated by Barer and Stoddart. It is essential to have early meaningful and ongoing engagement of health professionals in the planning process.

A next step would be to identify operational targets and indicators for the strategic directions enumerated above and to identify the appropriate policy levers and stakeholders responsible for them.

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