Predicting Physician Supply and Future Need
Physician Resource Planning Committee

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Alberta Medical Association Section Representatives
Canadian Post-M.D. Education Registry (CAPER)
College of Physicians and Surgeons of Alberta (CPSA)
Health Authority Representatives

\[1\] Membership effective April 1, 2006.
\[2\] Dr. Douglas Perry is the Alberta Health and Wellness (AHW) Co-Chair, effective April 1, 2006. Mr. Richard Butler, Assistant Deputy Minister, Health Workforce Division, AHW, was the AHW Co-Chair from January 1, 2005 to March 31, 2006. PRPC thanks Mr. Butler for his leadership and participation in the PRPC activities.
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PURPOSE OF THE REPORT

Alberta’s Physician Resource Planning Committee (PRPC) has a mandate to provide advice on issues related to physician resource planning, and to develop and maintain a comprehensive Physician Resource Plan for Alberta. The resource plan sets a direction that will guide Alberta toward having the right number of physicians, with the right skills (including clinical, research, teaching, and administrative) in the right places, to serve the needs of Albertans. In 2006, the Committee continues its work and, through this report, is providing the first of several updates to the Minister of Health and Wellness. This year 2006 report provides a five-year update on success in meeting PRPC’s identified physician resource targets in the year 2000 PRPC report. PRPC’s findings are available to inform other physician policy setting bodies, and will be used to fulfill some of the reporting requirements under the 2004 Federal Provincial Health Accord.

PRPC also has a mandate to develop strategies to integrate physician resource planning with other health human resource planning and identify opportunities to create an integrated health system. PRPC’s recommendations to address these integration opportunities, along with updated physician resource supply and need projections will be presented in a subsequent report, later in 2006/07.

Executive Summary – 2005 Findings

Based on PRPC’s 2005 survey of Alberta Health Region Medical Directors, and coupled with projections from PRPC’s Supply Projection Model, PRPC identified the following physician resource needs:

- There is an existing shortage of almost 1,100 general practice and specialist physician full-time equivalents (FTEs) across the province; and
- Using rates for supply variables being experienced/most recently available during early 2006, PRPC projects a further shortage of 453 general practice and specialist physician FTEs in 2010, for a total of 1,541 physician FTEs required in addition to projected supply.

PRPC will be examining options to address these supply deficits, and will be providing recommendations in a subsequent report during 2006/07.

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3 The FTE measure used by PRPC is based on survey information gathered by the College of Physicians and Surgeons of Alberta (CPSA) from practicing Alberta physicians, regarding workload and average number of hours worked per week by physicians. The CPSA found Alberta physicians work an average of 50 hours per week, to an average total of 2400 hours per year. The use of this definition for physician FTEs does not suggest a standard or expectation for physician workload, but instead reflects average self-reported hours.

4 PRPC’s Supply Projection Model is the source for the supply projection.
1.0 CONTEXT FOR THE 2006 REPORT

1.1 - 2004 F/P/T Health Accord
The 2004 Health Accord between Federal, Provincial and Territorial jurisdictions included a commitment to report on workforce numbers and plans in the Health sector. Alberta committed to providing workforce numbers and early details on planning parameters, and PRPC’s work ties into this commitment. It is our understanding that not all jurisdictions have followed through on similar commitments. Regardless, the desire to fulfill our commitment provided a good opportunity to re-engage the work of PRPC. Our reporting will be several months late, but will be available as requested to other jurisdictions, once vetted through our internal stakeholders.

1.2 - Update Reporting
PRPC was initially meant to carry on its work from the 2000 report. However, in the intervening 5 years, much of the work involved maintenance of established policy, without renewing planning activities. CPSA carried on with its mandate to report physician numbers on a quarterly basis. This report is the first general update since the year 2000 report.

1.3 - Health System Reform
Reform has carried on in many aspects of the health system and a number of key initiatives that impact physician workforce can be mentioned. The Provincial Health region structure has changed since the 2000 report. There are now 9 Regions and Boards. Increased integration of Medical Staffs have occurred within the Regions. Enumerating Regional physicians has changed due to the shift in Regional boundaries.

Alternate Relationship Plans have been introduced and are gradually becoming more widespread throughout the province. These plans define the relationships for service and payment amongst physician groups, the Regions, and academic institutions. They recognize the variety of roles played by physicians, and anecdotally have assisted recruitment efforts in some cases. As of April 2006, there are currently more than 800 physicians in academic and non-academic ARP’s in the province.

Shared care models
An increasing number of programs, delivered by Regions and Boards employ models of care that integrate the work of multidisciplinary teams. While the impact on workforce numbers arising from this strong movement in service delivery has not been studied here, the shift in work flow, responsibilities and access to programs may have substantial effect on workforce planning.

Primary Care Networks
As of April 2006, 14 Primary Care Networks are operating in seven health regions, involving 550 family physicians providing services to more than 700,000 patients. A total of 15 other Primary Care Networks are in various stages of development in all health
regions. This shift also has the potential to impact workforce numbers as team based primary care, and 24 hour access to a defined group of services for a specific population becomes more widespread.

1.4 - Trilateral Agreement
A trilateral (Alberta Medical Association, Alberta Health and Wellness, Regional Health Authority) agreement was reached in year 2003, for an eight year term. Current talks include the impact on workforce changes in relation to the Master Agreement. Since signing, the pace of population increase has risen significantly, necessitating further discussion on the terms of the Agreement.

1.5 - National/Provincial/Territorial Integrated Health Human Resource Planning
Efforts to advance workforce planning in a manner that attends to the inter-relatedness of the work of health personnel continues provincially and nationally. Shortages of training capacity and a general shortage of health care personnel currently will be compounded by ageing of the health workforce, increased immigration and population growth, and increasingly complex care environments. Workforce planning is felt to be less effective when policies do not recognize the need to undertake multi-disciplinary planning in conjunction with sector specific and discipline specific planning.
2.0 PROGRESS SINCE THE YEAR 2000 REPORT

2.1 -- FINDINGS FROM PRPC’s YEAR 2000 REPORT


The Alberta physician resource full-time equivalent (FTE) baseline, which PRPC established in its year 2000 report, was approximately 4,579 physician FTEs. Year 2000 data from Alberta’s health authorities indicated a projected need for approximately 1329 additional physician FTEs across the province during the subsequent five year period (1999/2000 to 2004/05). In its analysis, PRPC focused on new physician resources required to meet additional demands for medical services, primarily caused through population growth and aging of the population. PRPC’s identified needs for additional physician resources during the 1999/2000 to 2004/05 period did not include physicians to replace those physicians who leave the system through retirement, normal migration, etc. Replacement of practicing physicians was assumed to occur from the current “status quo” stock. Comparing these needs against status quo supply model projections indicated the following physician resource deficits:

- An existing shortage/future supply deficit of 610 general practice/family physician FTEs; and
- An existing shortage/future supply deficit of 719 specialist FTEs;

for a total cumulative physician resource supply "gap" of 1,329 physician FTEs for the province during the five years 1999/2000-2004/05.

In addition to physician resource deficits, the report was significant in that it reported broad agreement on strategies to address the identified physician resource challenges. The PRPC made substantial progress towards understanding Alberta’s existing physician resources and future needs. The Committee’s work provided the infrastructure and set a direction to enable key stakeholders to move forward with decisions that would result in appropriate training and recruitment of physicians. PRPC’s work also assisted movement toward new service delivery models for effective care for the population.

2.2 – PHYSICIAN RESOURCE SUPPLY CHANGES 1999/2000 – 2004/05

There have been a number of significant developments affecting Alberta’s physician supply since the release of PRPC’s report in the year 2000. Highlights include:

- On August 16, 2000, creation of the Alberta Rural Family Medicine Network (ARFMN) was announced. Under the program, the Alberta Government
committed to provide 40 new and ongoing postgraduate training seats for training targeted to create rural family medicine physicians for Alberta. In its report, PRPC had indicated its support for such targeted programs (more information at www.arfmn.ab.ca).

In the Fall of 2005, the ARFMN’s quota of entry seats increased by 50 percent, from 20 to 30 seats annually. This increase will result in an overall annual enrolment of 60 family medicine residents receiving training and providing service in rural Alberta.

• Since the increase to postgraduate training resources announced on February 14, 2000, undergraduate and postgraduate positions have seen significant increases in Alberta. Annual Alberta medical school entry positions increased from a provincial total of 171 in 2000, to a 2006/07 quota of 258 annually, an approximate 50 percent increase. In the same period, Alberta’s number of postgraduate positions has increased by 45 percent, to a maximum for the 2006/07 academic year of 1035 ongoing training positions. In addition, flex funding is provided annually to medical faculties, to allow increased ability to respond to targeted training requests.

• Data from the College of Physicians and Surgeons of Alberta indicates that, during the time period from December 31, 1999 to December 31, 2004, the province experienced a 1030 physician (20.3%) increase its total number of physicians. Specialists numbers increased by 572 (23.4%), while non-specialist numbers grew by 458 (17.5%). The College reports a provincial total of 5060 fully registered physicians (2443 specialists and 2617 non-specialists) at the end of 1999, and 6090 physicians (3015 specialists and 3075 non-specialists) at the end of 2004.

• In 2001, non-CaRMS training opportunities were announced for Alberta International Medical Graduates (IMGs) through creation of the AIMG Program. Initially, the program offered eight Family Medicine training positions for qualified Alberta IMGs. For 2006/07, the program has a total of 24 IMGs beginning training and will interview for up to 42 new family medicine and specialty training positions. (www.aimg.ab.ca).

2.3 – OTHER DEVELOPMENTS SINCE THE YEAR 2000 PRPC REPORT

Additional information about changes related to physician and health services includes:

• The Alberta Physician Resource Planning Database was again used for storing and reporting data collected during the PRPC’s 2005 survey of RHA’s medical service needs. Additionally, since 2000, an annual labour survey of RHAs occurs, and includes physicians. This information is available to PRPC.

• The PRPC Supply and Projection model’s methodologies have been refined based on opportunities identified during the previous PRPC process.
The new data updated the PRPC’s physician resource database and indicated progress toward meeting physician resource supply needs.

The year 2000 PRPC report showed significant needs for many physician types. Establishing a priority ranking among physician needs, based on agreed upon criteria, is a complex and difficult undertaking which has not yet occurred. Establishing these priorities based on survey 2005 findings, will be beneficial to PRPC’s work to create additional recommendations that address identified medical service needs.

The value of AMA Section input to the PRPC physician resource planning process is recognized. For the two reports, approximately 40 percent of all Sections have responded to PRPC surveys. Section response will be used by PRPC during 2006, to provide context, identify current and future resourcing issues, and to assist in recommendation scenario modelling. Actions to achieve improved engagement of Sections will also be discussed by PRPC.

Exploration of service delivery systems innovations, alternative practice models and shared care models is ongoing throughout the province. PRPC will continue to observe these projects, and developments elsewhere, and will continue to consider their impact in its planning.

Changes to the Alberta Special Medical Register occurred in October 2000, to provide recognition of physician extenders. The College of Physicians and Surgeons of Alberta reports that, in 2006, there are approximately 153 of these providers registered on the Alberta Special Medical Register.

Opportunities have, and are being developed within Calgary and Capital Health Region facilities for IMGs to work as assistants to physicians. The IMGs work under the close supervision of a physician in areas such as Neurosurgery, Internal Medicine and Oncology.

Since the PRPC’s 2000 report, adjustments have been made to the AHW/AMA Agreement that resulted in increases in physician fees. Also, other initiatives were introduced, including a specialist on-call remuneration program and funding for enhancements to physician office systems. All these changes contribute to increased attractiveness of the Alberta practice environment.
3.0 PRPC YEAR 2005 FINDINGS

As part of its work to update year 2000 physician resource data and create an updated physician resource plan for Alberta, PRPC surveyed the province’s RHA medical directors during the summer of 2005. The data preparation and survey methodology is described in Appendix 2 of this report.

In its year 2000 report, PRPC identified a total current and future need for approximately 1329 new physician FTEs, in addition to the existing physician workforce in place in Alberta, during the period from 1999/2000 to 2004/05. As previously stated, these new physician resources were needed to meet increased projected demand for medical services, primarily caused through population growth and aging of the population. Replacement of physicians in the current stock was assumed to occur from the current “status quo” supply. Replacement physicians were not part of PRPC’s identified need for additional physician resources during the 1999/2000 to 2004/05 period. Successful recruitment of all these additional physician FTEs would result in approximately 5909 physician FTEs (2971 non-specialists and 2938 specialists) providing service in Alberta.

Based on data (see Appendices 3 to 6) from the year 2005 PRPC survey, it appears that:

- Alberta’s physician workforce grew to approximately 5613 FTEs during the five year period after the year 2000 report. These values indicate that Alberta realized approximately 77 percent of the physician workforce growth called for in the year 2000 PRPC report.
- Alberta had greater success in recruiting additional specialist physician resources relative to family/general practice resources. Alberta realized approximately 94 percent of the total specialist FTEs called for in the year 2000 PRPC report. Family/general practice FTEs realized about 58 percent of the FTE increases called for in the year 2000 report. These overall numbers do not address distribution or individual specialty quotas.

In spite of this relative success, the year 2005 PRPC report findings indicate significant additional work to be done to address current and future physician resource needs:

- Alberta has a current shortage of almost 1,100 physician FTEs: approximately 600 FTEs are needed for family/general practice, and 483 FTEs are needed across the various specialities.
- During the next five years, the total physician resource “gap” (total need, including current shortage, minus supply) is expected to reach 1,541 FTEs.
- Similar to the year 2000 PRPC report, these physician resource needs identify the new physicians added to the system to provide increased capacity to deal with additional service demand but do not include replacement of practicing physicians. One of PRPC’s assumptions is that practicing physicians, who retire, leave Alberta, or leave the supply will be replaced from current supply inflows. With this assumption,
PRPC’s need numbers, in effect, constitute a physician resource plan for Alberta, but not a recruitment plan, as recruitment needed to replace currently-practicing Alberta physicians who leave the supply pool between 2005 to 2010 is not accounted for in need numbers.

### TABLE 3.1 - Summary of Year 2005 PRPC Report Findings

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</tbody>
</table>

<sup>2</sup> Source of 2005 RIF FTE: College of Physicians and Surgeons Registration data from Registration Information Forms (RIFs).

Values are rounded for presentation.

PRPC will be working with these numbers to develop strategies that will address the identified current and future needs. Strategies will need to consider current resource complements and composition, emerging trends, and future challenges to efficiently and effectively deal with resource challenges.
4.0 FUTURE WORK FOR PRPC

Through support of and collaboration with a number of partners, including Alberta RHAs, the College of Physicians and Surgeons of Alberta, and the Alberta Medical Association, PRPC succeeded in collecting opinion data regarding Alberta’s existing medical service needs, as well as future needs. Generally, progress has been made, however the collected data indicates there is still more work to do, particularly to ensure the province will have adequate resources to delivery services provided by non-specialist physicians.

PRPC is providing this report to update the status of the province’s physician resources. The Committee will undertake additional data collection and analysis during 2006, to examine the current practice environment in Alberta and Canada, and access threats and opportunities in many current trends and initiatives affecting physician practice. The Committee will be making use of its supply and need projection models to develop scenarios and forecast the outcomes of a variety of trends and policy directions. PRPC will draw upon expert resources to develop assumptions for use in projection modelling. PRPC will release another report discussing analysis and findings, and providing recommendations during 2006/07.
5.0 APPENDICES

APPENDIX 1  PRPC TERMS OF REFERENCE

APPENDIX 2  YEAR 2005 PRPC REPORT DATA PREPARATION AND SURVEY METHODOLOGY

APPENDIX 3  UPDATE OF YEAR 2000 PRPC REPORT DATA & YEAR 2005 PRPC PROVINCIAL DATA SUMMARY

APPENDIX 4  2005 PRPC MEDICAL SPECIALIST DATA SUMMARY

APPENDIX 5  2005 PRPC LABORATORY MEDICINE DATA SUMMARY

APPENDIX 6  2005 PRPC SURGICAL SPECIALTIES DATA SUMMARY

APPENDIX 7  PHYSICIAN RESOURCE PLANNING ACTIVITIES IN OTHER JURISDICTIONS
APPENDIX 1 - PRPC TERMS OF REFERENCE

PHYSICIAN RESOURCE PLANNING COMMITTEE

MANDATE:
PRPC is a committee with members nominated by their respective stakeholder organizations.

The Mandate of PRPC is to:
• develop physician resource plans for Alberta.
• provide advice about strategies and mechanisms to meet requirements of a physician resource plan.
• develop and recommend strategies to the appropriate stakeholders to integrate physician resource planning with planning for other health human resources provincially and within regional health authorities.
• Identify and inform Regional Health Authorities and other stakeholders on opportunities to better coordinate and/or integrate medical services to create an integrated health system.

To fulfill this mandate, PRPC
• Identifies, in consultation with other stakeholders, Alberta’s optimal number, mix, skill level and distribution of physicians, in collaboration with other health providers, to deliver appropriate care that meets the province’s health care needs,
• provides a provincial physician resource forecast that identifies current resources and Alberta’s short and long-term needs in the context of a changing health care system, and
• identifies short and long term physician resource supply priorities, and strategies to obtain priority resources.

DELIVERABLES:
PRPC will produce a provincial-level physician resource plan for Alberta, by December 31, 2005. including:
• Five and ten year horizon for projections, updated annually;
• Physician supply projections, by specialty;
• Physician need projections, by specialty;
• Survey information describing current unmet need for physician service;
• Expert (AMA Section, etc.) opinion about future physician supply and need; and
• Recommendations to address identified gaps.

MEMBERSHIP:
PRPC Membership:
• (1) Alberta Health and Wellness (Co-Chair)
• (1) Alberta Medical Association (AMA) (Co-Chair)
• (1) College of Physicians & Surgeons of Alberta (CPSA)
• (1) Regional Health Authorities
• (1) Faculties of Medicine
• (1) Professional Association of Residents of Alberta (PARA)
• (1) Medical Students’ Associations (UofA & UofC combined)

Ex-officio:
• (1) Post-Graduate Medical Education Advisory Group (PGMEAG)
• (1) Alberta Physician Resource Database Working Group
• (1) Alberta Rural Physician Action Plan Coordinating Committee (RPAP)
• (1) Alberta International Medical Graduate Program (AIMG)

• The PRPC will select a Chair from among its members.
• The PRPC will determine how meetings will be conducted.
• The PRPC will draw upon expertise and resources as required, and will establish working groups
• Member organizations are to name alternate PRPC members, who will attend when the primary member is not available.
• PRPC will review Chair, membership and meeting procedure decisions after its first six months of meetings (i.e. August 2005).
• Alberta Health and Wellness will provide support for PRPC. Alberta Health and Wellness and the Alberta Medical Association will provide members to a support team as required.

BACKGROUND AND PRINCIPLES:
The Parties to the Tri-lateral Master Agreement and the PRPC recognize that:
• PRPC has a broader audience than the Secretariat or Master Committee.
• Physician workforce planning must be neutral and objective.
• Any reports from the PRPC would not be regarded as recruitment/physician resource plans under the Tri-lateral Master Agreement and would accordingly not be subject to automatic adjustment under the Agreement.
• PRPC does not report through the Tripartite Master Agreement structure.
• The PRPC report be shared widely.
• PRPC provides a forum to coordinate advice and proposed initiatives including those of PGMEAG, RPAP and AIMG. This relationship does not imply that these groups report to PRPC.

• PRPC provides advice on physician resource plans as requested.

TERM:
• Ongoing, with review of Terms of Reference in August 2005 and February 2006.
As part of its work to update year 2000 physician resource data and create an updated physician resource plan for Alberta, PRPC surveyed the province’s RHA medical directors during the summer of 2005.

Survey baseline physician activity data was drawn from the CPSA’s registration database. This data is collected through physician self reporting, as part of the annual registration process. Baseline data was populated to a template, which was similar to the template used in the year 2000 PRPC process (Appendix III). The template categorized physicians into family/general practice or their specialty certification, as recorded by the CPSA. All physician activity within each category was rolled up on a regional basis, and templates were populated with physician activity data for each RHA. For reasons of confidentiality, activity data was not reported on the template where the RHA’s physician headcount within the classification/specialty was composed of data from fewer than five physicians.

The data uses the CPSA’s physician full-time equivalent (FTE) to measure and report each physician’s activity. Alberta’s physician FTE value was previously derived by the CPSA, based on the total actual hours of activity reported by all registered physicians within the province during a particular year, divided by the number of physicians registering with the CPSA. In effect, the FTE represents an actual average annual level of activity for Alberta physicians. The FTE equates to approximately 2400 hours of service annually, and further breaks down to a workload of approximately 50 hours per week, 48 weeks per year. The CPSA collects FTE data by categories such as direct clinical work, teaching, research and practice management.

Verification of baseline information and collection of physician need data occurred through meetings and/or teleconferences with staff from medical affairs offices within each RHA. The baseline physician data was reviewed at these meetings and was reconciled by each RHA against its physician credentialing data. Discrepancies were investigated and explained, with adjustments made to data where necessary. The end result of the process was alignment between CPSA and RHAs’ data.

RHA’s current, five year and ten year physician resource needs, by physician specialty/classification were also requested during these meetings. RHAs made reference to their own internal documents, such as facility, service and physician resource plans, and/or consulted internally regarding needs, and reported back to the PRPC using the templates and FTE definition. This data reflects the additional physician resources required over and above existing capacity. That is, replacement from current supply is assumed for currently-practicing physicians, who stop practice and other physician activities during the projection period (2005 – 2010). RHAs’ FTE need data reflects requests for “net new” physician services.
Reporting from all RHAs was entered into the PRPC physician resource database and rolled up to a provincial level. The overall findings of this work are as follows:
## APPENDIX 3 - UPDATE OF YEAR 2000 PRPC REPORT DATA & YEAR 2005 PRPC PROVINCIAL DATA SUMMARY

### Table A3.1

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1. 2000 PRPC Report Data from Table 4.3.1 in Setting a Direction for Alberta’s Physician Workforce.
2. 2005 RIF FTE data was obtained from the College of Physicians and Surgeons of Alberta’s 2005 Registration Information Form (RIF) data, collected through self reporting by physicians as part of 2005 registration process.
3. GPs include family physicians/general practice physicians/non-specialists.
   Values are rounded for presentation.

### Table A3.2

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4. 2005 RIF FTE data was obtained from the College of Physicians and Surgeons of Alberta’s 2005 Registration Information Form (RIF) data, collected through self reporting by physicians as part of 2005 registration process.
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   Values are rounded for presentation.

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Physician Resource Planning Committee
Page 19
## Table A4.1

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</table>

6 - 2005 RIF FTE data was obtained from the College of Physicians and Surgeons of Alberta’s 2005 Registration Information Form (RIF) data, collected through self reporting by physicians as part of 2005 registration process. Values are rounded for presentation.
APPENDIX 5 - 2005 PRPC LABORATORY MEDICINE DATA SUMMARY

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7 - 2005 RIF FTE data was obtained from the College of Physicians and Surgeons of Alberta’s 2005 Registration Information Form (RIF) data, collected through self reporting by physicians as part of 2005 registration process.
Values are rounded for presentation.
## Table A6.1: 2005 PRPC Report Data

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<th>SURGICAL SPECIALTIES</th>
<th>2005 RIF FTEs</th>
<th>2005 Immediate Needs</th>
<th>2005 5-Year Need</th>
<th>Requested 2010 Total FTEs</th>
<th>Projected 2010 Total Supply</th>
<th>Shortage (-) Surplus (+) in 2010</th>
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</table>

8 - 2005 RIF FTE data was obtained from the College of Physicians and Surgeons of Alberta’s 2005 Registration Information Form (RIF) data, collected through self reporting by physicians as part of 2005 registration process.

Values are rounded for presentation.
WORKFORCE PLANNING BEING UNDERTAKEN BY OTHER PLAYERS IN THE HEALTH CARE SYSTEM

XI.i SUPPLY, DISTRIBUTION AND MIGRATION OF CANADIAN PHYSICIANS, 2004

The CIHI report published new statistics showing a 5% increase in the number of physicians in Canada between 2000 and 2004 (from 57,803 in 2000 to 60,612 in 2004).

Number of Physicians Leaving Canada and Returning to Canada
The CIHI data also revealed that, for the first time since 1969 (the period for which data are available), more Canadian physicians returned to Canada than moved abroad. During the period from 2000 to 2004, Canada saw a decrease in the number of physicians leaving the country and an increase in the number of physicians returning to the country. For instance, in 2004, 317 physicians returned to Canada, whereas 262 moved abroad. The CIHI Green Paper points out that the new data reflect a continuation in the trend seen since the mid-1990s of a decreasing number of doctors leaving Canada for opportunities in other countries. In the period between 2000 and 2004, the number of physicians who left Canada declined by 38%. In 2004, 262 physicians left Canada (compared to 420 physicians who left in 2000). Back in 1994, 771 physicians moved abroad.

One quarter of the physicians who moved abroad in 2004 received their medical degree from a foreign medical school, and 44% received their degree within the last 10 years. The majority of the physicians who left Canada were male (69%). Also, more male doctors returned from abroad (74%) than females.

Total number of doctors keeps pace with population growth
The CIHI report also pointed out that since the late 1990s the total number of doctors in Canada has kept pace with population growth. During the period from 2000 to 2004, the number of doctors per 100,000 population remained quite stable (188 in 2000 and 189 in 2004).

Physicians Getting Older, More Women in the Workforce
In the period from 2000 to 2004, the average age of physicians in Canada increased by one year, from 48 to 49. During the same time period, the proportion of physicians under age 40 dropped 13%. Canada’s physician workforce is increasingly female. CIHI’s latest statistics show that the number of female physicians increased by 14% in the last five years, from 16,945 in 2000 to 19,365 in 2004. In contrast, the number of male
physicians increased only slightly (0.6%), from 40,841 in 2000 to 41,071 in 2004. In 2004, women accounted for almost one-third (32%) of the total supply of physicians, representing a 10% increase since 2000. However, among physicians age 40 and under, females represented nearly half (47%) of the total physician workforce in 2004.

**Increasing Number of Family Physicians and Decreasing Number of Specialists**

While the total number of physicians per 100,000 population has remained quite stable, the situation is not the same for both family physicians and specialists. Between 2000 and 2004, the number of family physicians increased from 94 per 100,000 to 98 per 100,000. However, the overall number of specialists per 100,000 population declined from 93 to 91 in the same five-year period.

**Provincial Variations/Trends in Physician Supply**

Among the provinces, Alberta and Prince Edward Island had the largest percentage increase in the number of physicians. The number rose by 19% and 18%, respectively, between 2000 and 2004. Increases also occurred in New Brunswick (9.5%), Newfoundland and Labrador (7%), Nova Scotia (5.4%), British Columbia (4%) and Ontario (4%). The remaining provinces and territories experienced little variation in the total number of physicians.

In 2004, four provinces exceeded the national ratio of 189 physicians per 100,000 population: Quebec and Nova Scotia had the highest ratio, with 213 physicians per 100,000 in 2004; British Columbia had 196 physicians per 100,000 population in 2004; and Newfoundland and Labrador had 192. The provinces with the fewest physicians per 100,000 population were Saskatchewan (154) and Prince Edward Island (152).

**Illustrations available:**

*Table 1. Number of Physicians by Province/Territory, Canada, 2000 and 2004*
*Figure 1. Number of Family Medicine Physicians and Specialists, Canada, 2000 to 2004*
*Figure 2. Number of Physicians per 100,000 Population by Physician Type, Canada, 2000 to 2004*
*Figure 3. Number of Physicians per 100,000 Population by Province/Territory, Canada, 2004*
*Figure 4. Percentage of Male and Female Physicians, Canada, 2000 to 2004*
*Figure 5. Number of Physicians Who Moved Abroad or Returned From Abroad, Canada, 1969 to 2004*

**XI.ii** NATIONAL PHYSICIAN SURVEY (NPS): Workforce, satisfaction and demographic statistics concerning current and future physicians in Canada

The National Physician Survey was undertaken by the College of Family Physicians of Canada (CFPC), the Canadian Medical Association (CMA) and the Royal College of Physicians and Surgeons of Canada (RCPSC). This survey, first published in November 2004, gathered information on practice profiles, workload, access, satisfaction,
remuneration, etc. The survey was the largest ever poll of Canadian physicians. About 21,000 Canadian physicians (36%) completed surveys. Physician results were released by specialty, by age and sex, national and provincial, medical resident results and medical student results. (http://www.cfpc.ca/nps/English/home.asp)

Canada’s tight physician supply is negatively impacting access to care and wait times for Canadians according to the CMA, CFPC and RCPSC. The NPS found that sixty percent of family physicians are either limiting the number of new patients that they see or are not taking new patients at all. The situation is similar among specialists, even though the factors may be different (including not only physician supply but other elements such as operating room time and hospital staff availability).

According to the NPS, most physicians are still working harder than they would like. The NPS also showed that as many as 3,800 of Canada’s physicians were planning to retire within two years.

One quarter of Alberta physicians plan to reduce their work week in the next two years. About 5 percent plan to retire in the next two years and 4 percent plan to leave the province. Seventy percent of Alberta physicians are satisfied with their current professional life. Fifty-three percent are satisfied with the balance between their professional and personal life.

Medical residents’ responses about their training, learning environment, future practice/work setting profile, future practice/work profile, time allocation, professional income, education and demographics, reveal important information for health care planners.

XI.iii TOWARD A PAN-CANADIAN PLANNING FRAMEWORK FOR HEALTH HUMAN RESOURCES – A GREEN PAPER

At the annual meeting of the Canadian Medical Association (CMA) in Edmonton in August 2005, a joint human resources (HR) green paper was released by the CMA and Canadian Nurses Association (CAN). (http://cna-aiic.ca/CNA/documents/pdf/publications/CMA_CNA_Green_Paper_e.pdf) The joint HR green paper outlined the impact of cuts in medical and nursing school enrolment in the 1990s. The CNA is projecting a shortage of 113,000 nurses by 2016. The CMA suggests opportunities for medical education in Canada remain elusive, with only 6.5 places per 100,000 people versus 12.2 per 100,000 people in England.

In 2002 Canada ranked 24th 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. 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.
At the annual meeting, the General Council of the CMA passed a series of 18 motions dealing with HR issues, including one calling for development of a "pan-Canadian" HR strategic planning framework by the CMA and other national health groups.

The CMA/CNA Green Paper sets out for discussion 10 core principles and associated strategic directions that might underpin a strategic human resource planning approach in Canada, under the themes of patient-centred care, planning and career life cycle.

The Green Paper points out that the planning of Canada’s health workforce, where it has occurred, has been done largely within provinces and territories, and for various health disciplines in isolation of each other. According to the authors, 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. The CMA and CNA feel that such an approach is not sustainable. They argue that a strategic plan for the health workforce can only be successful if it is integrated across the provinces/territories and across the various health professional disciplines.

XI.iv SAFETY AND UTILIZATION OF GENERAL PRACTITIONER AND FAMILY PHYSICIAN SERVICES IN ONTARIO

In August 2005, The Institute for Clinical Evaluative Sciences (ICES) published an Investigative Report entitled Safety and Utilization of General Practitioner and Family Physician Services in Ontario. (http://www.ices.on.ca/file/FP-GP_aug08_FINAL.pdf) ICES is an independent, non-profit organization that conducts health services evaluations on a broad range of topical issues to enhance the effectiveness of health care for Ontarians.

This report examines trends affecting the sustainability of Ontario’s primary care workforce, and recommends increased vigilance in reviewing and monitoring the impact of established policies governing physician supply and models of care, as well as evolving social trends.

Ontario has a shortage of primary care physicians. This study examined data from physician registries and Ontario Health Insurance Plan records between 1993/94 and 2001/2002 to investigate how Ontarians are accessing primary care services and how the supply of general practitioners and family physicians has evolved.

The authors found that the face of family medicine changed substantially over the study period. Physician supply has decreased, the workforce is aging, there are more female doctors, the comprehensive of care continues to decline, and there has been some geographic redistribution of the family physician workforce in Ontario, with Northern Ontario experiencing the only increase.
The authors suggest these trends are significant because primary care practitioners are critical to accessing the health system, as they serve as a first line of contact for patients and a venue for accessing specialized services. They concluded that health human resource planners need to regularly review and monitor the impact of their policies, as well as evolving social trends, to maintain an efficient system that responds to patient needs.