

## MEDICAL WORKFORCE AND POLICY UPDATE - CANADA

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### BACKGROUND

In 1964, based on the recommendations of a Royal Commission on Health Services, Canada increased the capacity of its existing medical training system and built four new schools in an effort to expand the supply of Canadian trained physicians. Between 1968 and 1985 the number of medical school graduates increased from 1006 to 1835 per year.<sup>1,2</sup>

Another factor affecting the overall supply of physicians during this period was the influx of graduates of foreign medical schools which in the early 1960s and 1970s equalled the number being produced in Canadian medical schools (approximately 1000 per year). In 1975, the National Committee on Physician Manpower concluded that most future needs could be met by Canadian school graduates and therefore recommended the elimination of the preferred status for immigrating physicians.<sup>3</sup> The implementation of this recommendation resulted in a 75-80% reduction in the number of graduates of foreign medical schools entering Canada.<sup>4</sup>

Despite this measure, the number of landed immigrants indicating physician as their intended occupation averaged about 250 per year during the 1980s. Many of these physicians were eventually able to practice. In addition, approximately 130 foreign physicians were actively recruited each year to meet the needs of underserved areas of Canada.<sup>5</sup>

Both the increase in medical schools and the continuing supply of foreign trained physicians resulted in a growth in the physician population between 1961 and 1989 of about 3.7% annually while the population averaged only 1.5% increases each year.

Concern that there was an impending situation of oversupply led a few medical schools to reduce enrolment in the late 1980s. In addition, there were significant cuts made to other schools (total of 10%) following the recommendations of the 1991 Barer-Stoddart Report. However, well before these measures had time to take effect, the supply of active physicians began to plateau relative to the population. On the supply side this was the result of many different factors such as increased emigration, increased retirement rates, and a correction of over-counting in the primary source of supply data at the national level.<sup>6</sup>

The early 1990s also brought changes to the licensure system that affected the ability of foreign physicians to become fully licensed to practice in Canada. There was now a two-

pathway system to licensure – either through certification with the Royal College of Physicians and Surgeons of Canada (RCPSC) or with the College of Family Physicians of Canada (CFPC). Since certification by either of these bodies required postgraduate training in the Canadian system, this limited graduates of foreign medical schools to those who could gain entrance into the training system through the limited number of training slots that were available to them.

With supply in the mid-1990s starting to dip relative to the population, increasingly medical organizations and the public were worried that there would not be adequate supply to meet the needs of a population that is both growing and aging. The government was frequently lobbied on this issue and in 1999 the Canadian Medical Forum Task Force on Physician Supply (see glossary for membership) issued a report signalling an impending shortage of physicians. It recommended that efforts be made to repatriate physicians who had emigrated and increases be made in the intake of both the Canadian undergraduate and postgraduate training systems.

Many provincial governments have responded by increasing the number of postgraduate training positions available to graduates of foreign medical schools already in Canada and/or increasing undergraduate enrolment. In addition to these initiatives, there are other factors that may well increase physician supply in numbers that have not yet been estimated. For instance, the federal government has recently made it easier for physicians to enter the country without prearranged employment. As well, in the fall of 1999, the RCPSC rescinded a decision that had restricted specialty certification of foreign physicians to those trained in jointly accredited medical schools of Canada and the United States.

## **PHYSICIAN SUPPLY**

The data presented in this section were extracted from the Southam Medical Database (SMDB) of the Canadian Institute for Health Information (CIHI). The figures presented are physician head counts and do not necessarily represent full-time equivalents. Included in the physician counts are clinicians and non-clinicians.

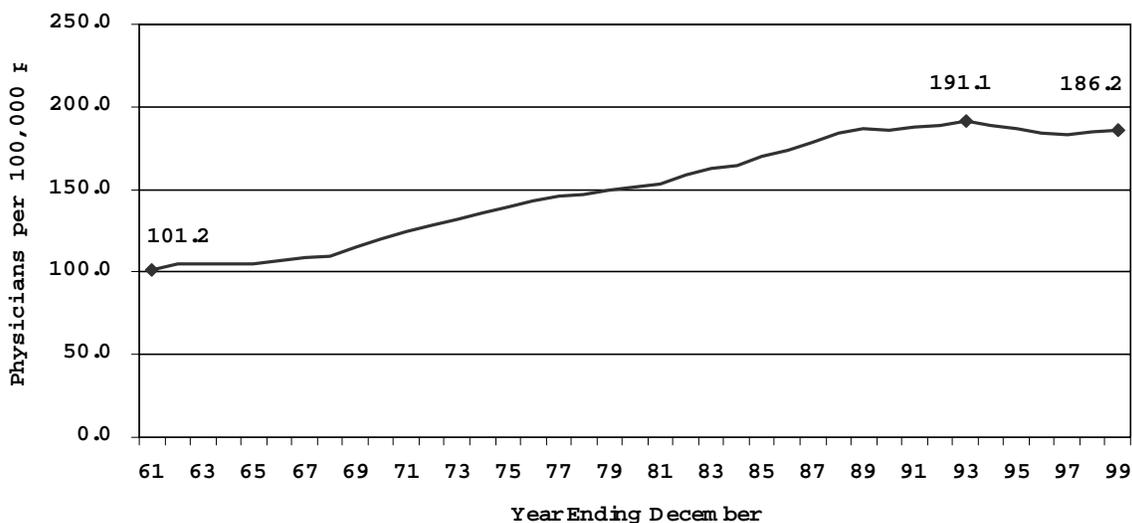
### **Counts and population ratios**

Between the years 1984 and 1989, the supply of physicians in Canada grew more rapidly than the population (Table 1). Over this period, physician supply grew about 3.6% annually, while the population grew at an average annual rate of 1.3%. Between 1989 and 1993, the supply continued to increase but at a much slower rate, peaking at 191 physicians per 100,000 population in 1993. The number of physicians per 100,000 population declined over the next four years to 183. For the last three years of the 1990s, the ratio has remained relatively stable ending with 186 physicians per 100,000 population in 1999 (Figure 1).

**Table 1: Physician supply and population growth, Canada, 1984 to 1999**

	Physicians		Population (000s)		Physicians per 100,000 Pop
	Counts	% Growth	Counts	% Growth	
1984	42,400	—	25,721.6	—	164.8
1985	44,230	4.3	25,963.1	0.9	170.4
1986	45,594	3.1	26,260.1	1.1	173.6
1987	47,572	4.3	26,609.7	1.3	178.8
1988	49,706	4.5	27,041.9	1.6	183.8
1989	51,314	3.2	27,475.2	1.6	186.8
1990	51,841	1.0	27,863.6	1.4	186.1
1991	52,863	2.0	28,183.3	1.1	187.6
1992	53,836	1.8	28,548.3	1.3	188.6
1993	55,155	2.5	28,865.8	1.1	191.1
1994	55,040	(0.2)	29,191.1	1.1	188.6
1995	55,006	(0.1)	29,509.4	1.1	186.4
1996	54,958	(0.1)	29,818.6	1.0	184.3
1997	55,243	0.5	30,111.3	1.0	183.5
1998	56,203	1.7	30,348.5	0.8	185.2
1999	56,990	1.4	30,606.7	0.9	186.2

Source: SMDB and CIHI

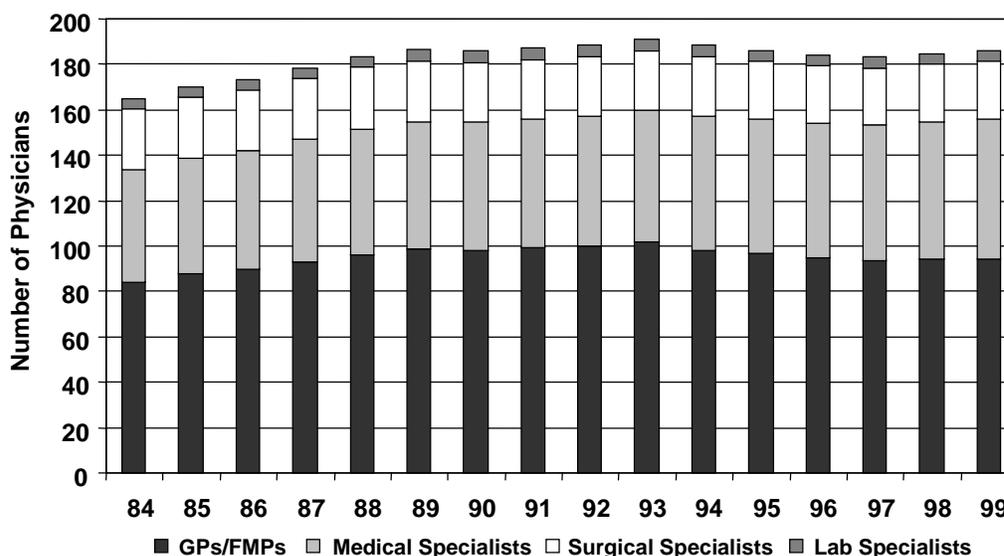
**Figure 1: Physicians per 100,000 population, Canada, 1961 to 1999**

Source: SMDB and CIHI

Throughout the 1980s and early 1990s, the proportion of physicians that practiced family medicine continued to increase, peaking at 53% in 1993. Since then, the proportion has gradually returned to the 50:50 split of family physicians and specialists.

The physician to population ratios differ by specialty group (Figure 2). The number of family physicians per 100,000 people has fallen from 102 in 1993 to 94 in 1999. The number of medical specialists per 100,000 population steadily increased between 1984 and 1999, from 50 to 62 medical specialists per 100,000 population. The number of surgical specialists decreased slightly over a similar time period while the ratio of laboratory specialists has remained stable at approximately 5 per 100,000 population.

**Figure 2: Physicians per 100,000 population, by specialty, Canada, 1984 to 1999**



Source: SMDB, CIHI

## Gender

Although the majority of physicians in Canada are male (71%), significant changes in medical school enrolment over the last 2 decades will contribute to a continued increase in the proportion of females in the physician population in the years to come. In the early 1970s, less than 18% of the Canadian medical school graduates were women; by 1998, the proportion had risen to almost half (48%).

Family medicine is a popular choice among female physicians and they currently represent 34% of all physicians in this discipline. Female physicians tend to practice in selected specialties such as paediatrics, dermatology, laboratory/pathology, obstetrics/gynaecology and public health. They are less likely to practice in some of the surgical specialties such as neurosurgery, orthopaedic surgery, otolaryngology and urology. The result is that medical specialists are 27% female compared with 14% of surgeons.

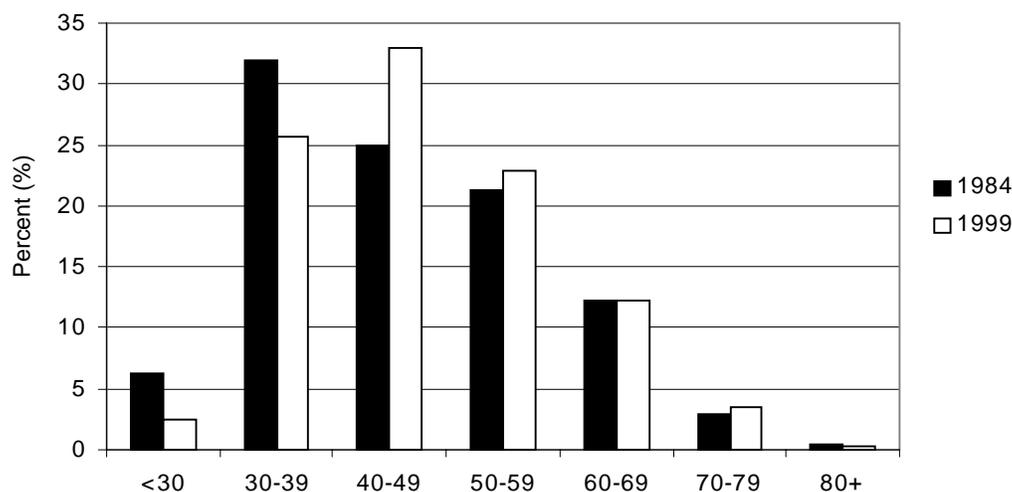
## Age

Over the past 15 years, Canada has been experiencing an aging of the physician workforce. The proportion of the physician population under the age of 40 years has decreased from 38% in 1984 to 28% in 1999, while the proportion of physicians in the 40-49 and 50-59 year

age groups has increased in recent years (Figure 3). Physicians over the age of 50 years currently represent 36% of the physician workforce.

A number of factors affect the average age of physicians. The large baby boom cohort of physicians is now middle-aged, the average age of physicians entering medical training is increasing, and some older physicians are extending their careers beyond what they had planned.

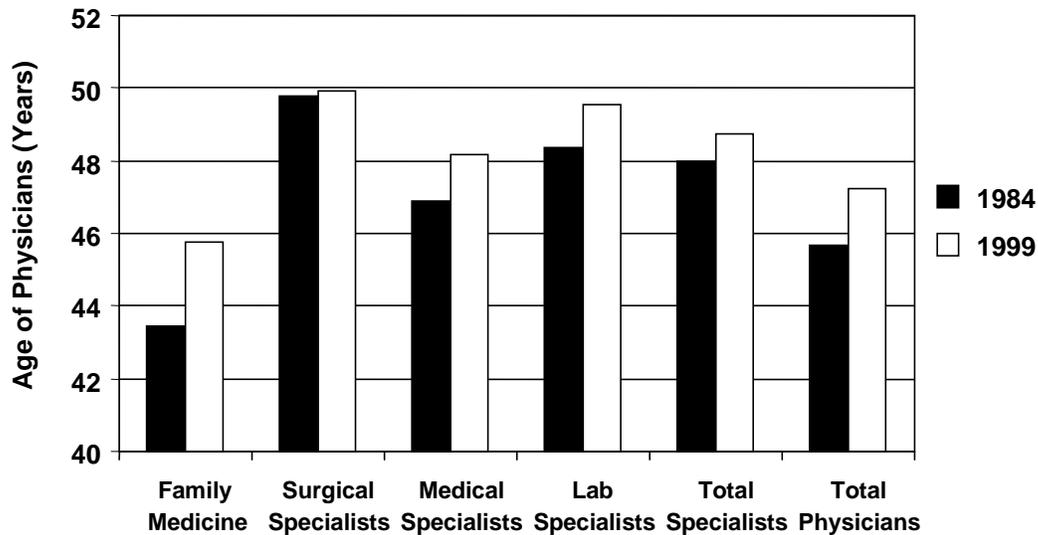
**Figure 3: Physicians, by age group, Canada, 1984 and 1999**



Source: SMDB and CIHI

Correspondingly, the average age of physicians in Canada has climbed over the last 15 years from 45.7 in 1984 to 47.2 years in 1999. There are differences in average age by gender and type of practice (Figure 4). Female physicians tend to be younger than their male colleagues partly due to the emergence of women in medicine in more recent years. Women currently represent 40% of the physician population below the age of 40.

Surgical specialists are the oldest cohort of physicians with an average age of close to 50 in 1999 but family medicine physicians have seen the greatest increase in average age between 1984 and 1999, from 43.4 to 45.8 years.

**Figure 4: Average age of physicians, by specialty, Canada, 1984 and 1999**

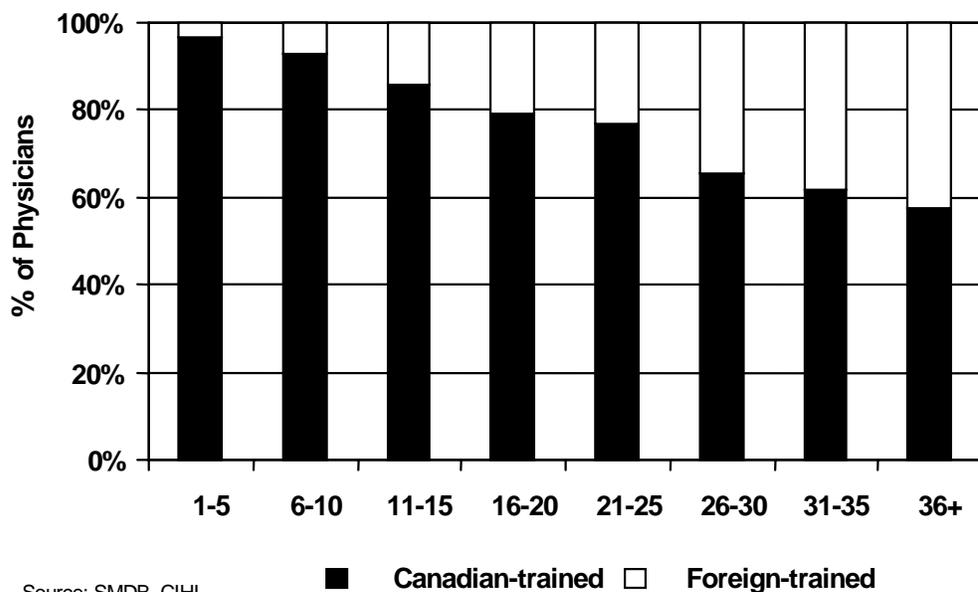
Source: SMDB, CIHI

### Graduates of foreign medical schools

During the 1970s, foreign trained physicians represented approximately 30% of the physician workforce in Canada. The proportion of foreign trained physicians has decreased over the last three decades such that currently, over 75% of the active pool of physicians have been educated in Canada. Almost 80% of family physicians and 75% of specialists physicians are Canadian graduates.

Figure 5 indicates the distribution of Canadian physicians by location of MD degree and years since graduation. These data indicate that Canadian educated physicians have more recently graduated from MD programs than foreign educated physicians. For example, 56% (7,473) of foreign educated physicians graduated 26 years ago or more, compared with only 27.3% (11,947) of Canadian educated physicians. Conversely 41% (17,985) of Canadian educated physicians graduated less than 15 years ago, compared with 14% (1,896) of foreign educated physicians.

**Figure 5: Percent of physicians, by years since graduation and place of graduation, Canada, 1999**



## PRACTICE SETTING AND REMUNERATION

Within the last 15 years Canada has seen a very gradual shift in office practice setting from solo practice, where physicians cover all their own expenses, to group arrangements where both expenses and/or patients are shared among more than one physician. In 1995, the ratio was about 50:50 solo to group but this had shifted to 36:64 by early 2000. Of all physicians who reported being in either solo or group practice, family physicians at 72% were more likely than medical specialists (62%) or surgical specialists (47%) to be in group practice.<sup>7</sup>

Fee-for-service is still the most dominant method of paying independent physician practitioners in Canada with almost two-thirds reporting that 90% or more of their professional earnings are derived from fee-for-service billings. Some provinces report that in excess of 90% of physicians are paid only on a fee-for-service basis for services funded by the public medical care plans.

It can be said that the proportion of pure fee-for-service physicians is on the decline but the rate of abandoning this method of payment is slow, due probably to a combination of personal choice and lack of alternate opportunities. Survey data show that the proportion of physicians who received 90% or more of their earnings through the fee-for-service method has fallen from 66% in 1995 to 62% by 2000. Throughout this period men were slightly more likely than women to be paid on a fee-for-service basis.

A more marked change can be seen in the shift away from fee-for-service as physicians' preferred choice of remuneration. In 1995, half of all survey respondents preferred the fee-

for-service method of payment but this number had declined to 33% by 1999; it was up again slightly to 37% in 2000. Many physicians now say they would prefer to be paid either a salary or by some sort of arrangement that combines fee-for-service with other methods of payment such as sessional or salary. Females were far more likely to prefer alternate methods with only 28% preferring fee-for-service in 2000 compared with 42% of their male colleagues.

## **MODELS OF CARE**

The fee-for-service model has traditionally been the primary method of payment for physicians in Canada, alternate forms of payment and funding have existed for quite some time in all provinces, while many are in the process of conducting pilot studies to determine the feasibility and cost effectiveness of non-fee-for-service models.<sup>8</sup>

Centres locaux de services communitaires (CLSCs) exist only in the province of Quebec and are responsible for a defined population and a salaried multidisciplinary workforce. In addition to physicians, CLSCs employ nurses, family and social aids, social workers, community organizers, dental and workplace hygienists, psychologists, human relations agents, information officers, receptionists, administrators and support staff.

Another example are Community Health Centres (CHCs) that provide primary care and health promotion services using multidisciplinary teams of health care providers that are paid on a salary rather than through a fee-for-service system. Services are designed to meet the specific needs of a defined community. In addition, CHCs provide a variety of health promotion and illness prevention services which focus on raising awareness of the broader determinants of health such as employment, education, environment, isolation and poverty.

In Ontario, Health Service Organizations (HSOs) have existed since the early 1970s with the objective of providing primary medical care services to a voluntarily registered group of clients. The Ministry of Health finances the provision of services through a monthly age/sex adjusted capitation payment for each patient on the roster. The government has the right to withhold the per month capitation payment for any rostered patient that receives primary care services elsewhere.

Some academic health science centres have established alternate funding plans (AFPs) whereby contracts between some physicians or groups of physicians and the government stipulate a payment other than fee-for-service. Two medical schools and the largest children's hospital in Canada are entirely funded this way.

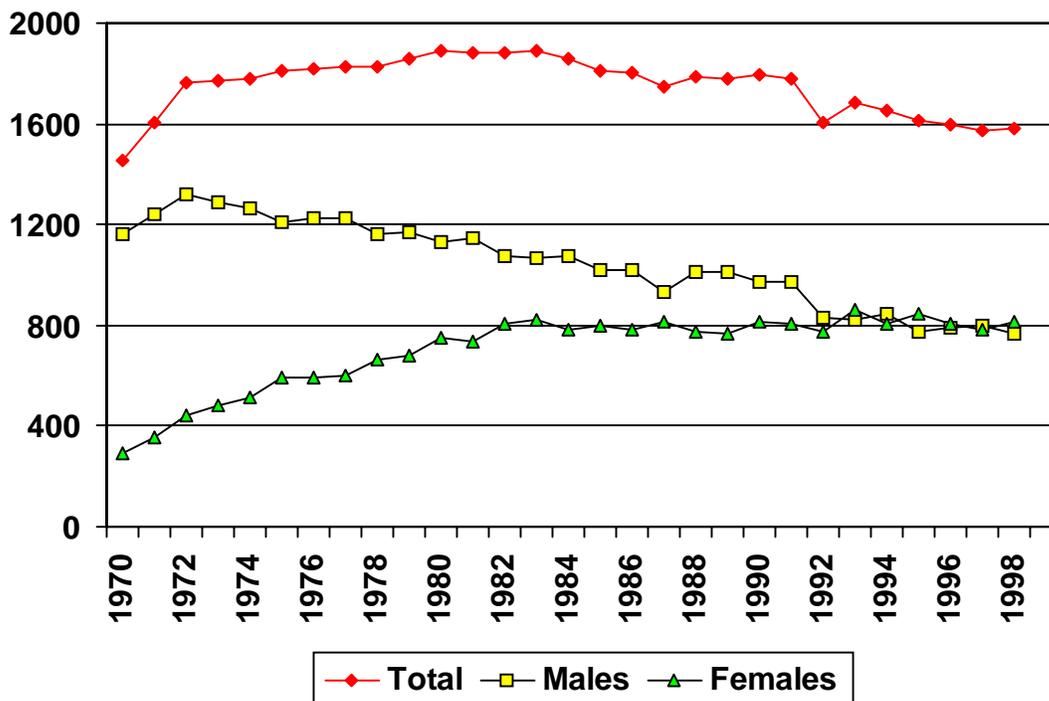
## **DOMESTIC PRODUCTION**

### **Undergraduate education**

There are 16 medical schools in Canada with an approximate intake of 1580 students per year or a rate of 1 medical student per 20,000 citizens (when visa students are removed from the count). First year enrolment peaked in 1980/81 with 1887 students (1 per 13,000 citizens) but is now at its lowest level in 25 years (Figure 6).

The application process to enter medical school in Canada is very competitive. Typically, medical schools interview 4-5 highly qualified students for each available position. In 1970, only 1 in 5 first year students were female but this number has increased gradually such that by 1993, they comprised over half of the class. For the last few years there has been an equal distribution between successful male and female candidates entering first year medical school.

**Figure 6: First year enrolment in faculties of medicine, by sex, Canada, 1970 to 1998**



Source: Canadian Medical Education Statistics, Association of Canadian Medical Colleges

Students train for a total of 4 years and in 1998-99 there were close to 6400 students enrolled in Canadian medical schools. Of these, 233 were visa students, a quarter of whom came from Malaysia. The number of visa students has more than doubled in the last decade.

Since the 1998/99 school year, there have been numerous increases announced in medical school enrolment totalling almost 200 new positions.

## Postgraduate training

The vast majority of postgraduate training positions in Canada are funded by provincial Ministries of Health. These positions are filled mostly by graduates of Canadian medical schools but include as well graduates of foreign medical schools who are permanent residents of Canada (ie. not visa trainees).

Visa trainees from other countries are also accepted into Canadian postgraduate training programs but are funded by their home country and the vast majority return there upon completion of training. The number of visa trainees accepted into the system has increased by almost 50% from 435 in 1994 to 646 in 1999.<sup>9</sup> Increases in visa students suggest that the Canadian medical training system has the capacity to expand if required.

The total number of government funded postgraduate training positions has decreased slightly from 6674 in 1996 to 6494 in 1999 (3%). This reflects a slightly smaller number of slots for Canadian graduates (1%) as well as a significant decrease (25%) in the number of funded positions for foreign graduates. The latter group has steadily declined over the years from 831 in 1992 to 291 in 1999 (Figure 7). Since the fall of 1999, provincial governments have increased the number of funded postgraduate training positions by 74 effective 2000 and another 40 effective 2001-2002.

The effect of the 1993 10% decrease in Canadian medical school enrolment can be seen by looking at the trends in new Canadian graduates entering training each year. There was a 9% decrease in the number of current year graduates in training between 1995 and 1997 when the 1993 cuts would first be realized in the postgraduate training system.

There is a national process which matches graduating medical students with the available postgraduate training positions. It is conducted by the Canadian Resident Matching Service and has always had a very high success rate (88% in 2000) in matching students to their first choice discipline (although not always in their first choice of location).<sup>10</sup>

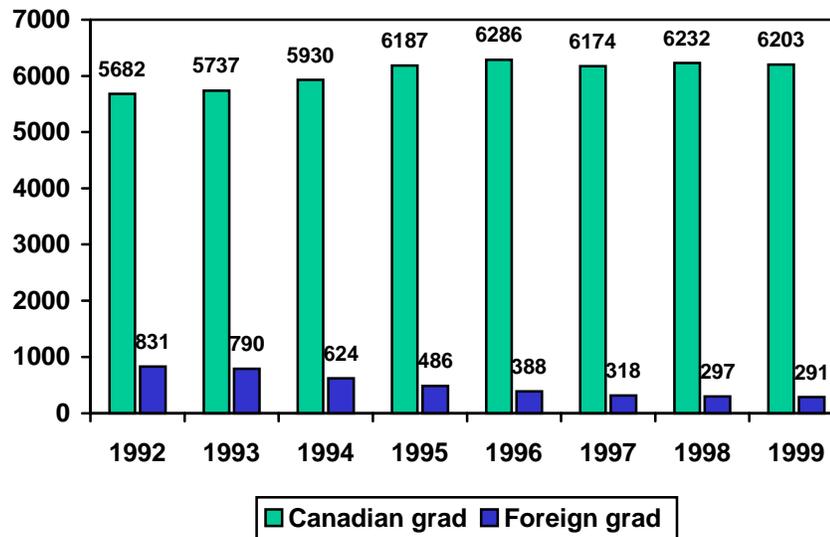
Women typically match to these first choice disciplines at a slightly better rate than their male classmates. In the 2000 match, women were more likely than men to indicate family medicine, psychiatry, paediatrics and obstetrics/gynaecology as their first choice. Men, on the other hand, were much more likely to want to become surgeons (27% of men versus 9% of women in the match).

The percentage of graduates choosing family medicine is down from 35% of the total in 1997 to 29% in 2000, even though the percentage of positions available for family medicine has remained relatively constant at around 38% of the total. The latest cohort (1999) of trainees that completed their training and were ready to enter practice comprised 40% family physicians and 60% specialists.

In 1999, the National Coordinating Committee on Postgraduate Medical Training (see glossary for membership) released two reports signalling concern that there will be too few generalist specialists and family physicians in the future<sup>11,12</sup>.

**Figure 7: Regular Ministry of Health funded trainees, Canada, 1992 to 1999**

(includes Ministry funded visa and reentry trainees)



Source: Canadian Post-MD Education Registry

**MIX OF DISCIPLINES**

A 50:50 mix of family medicine to specialists is widely supported in Canada. Preliminary national-level data appear to indicate that a shift will be required to increase the training of family physicians (and decrease specialty training opportunities) if this ratio is to be maintained.

The age profile of the physician workforce is not homogeneous (some specialty cohorts are significantly older than the average) and there is agreement between government and physician organizations that the more aged generalist specialty workforce (ie. general surgeons, obstetricians, paediatricians, general internists) cannot be replaced given the current mix of postgraduate specialty training positions.

Reallocations among specialty training programs are difficult as medical schools are faced with uncertainty about which specialty or subspecialty programs to downsize. Moreover, specialty trainees provide significant support to teaching faculty in the provision of needed services in large tertiary care institutions for which faculty members generally can bill the various provincial medical plans.

Periodic recruitment problems in one or another specialty field (eg. radiation oncology) may be a product of insufficient numbers to fill available posts due to imperfect planning for future specialty needs. These shortfalls are difficult to eliminate due to the small size of some

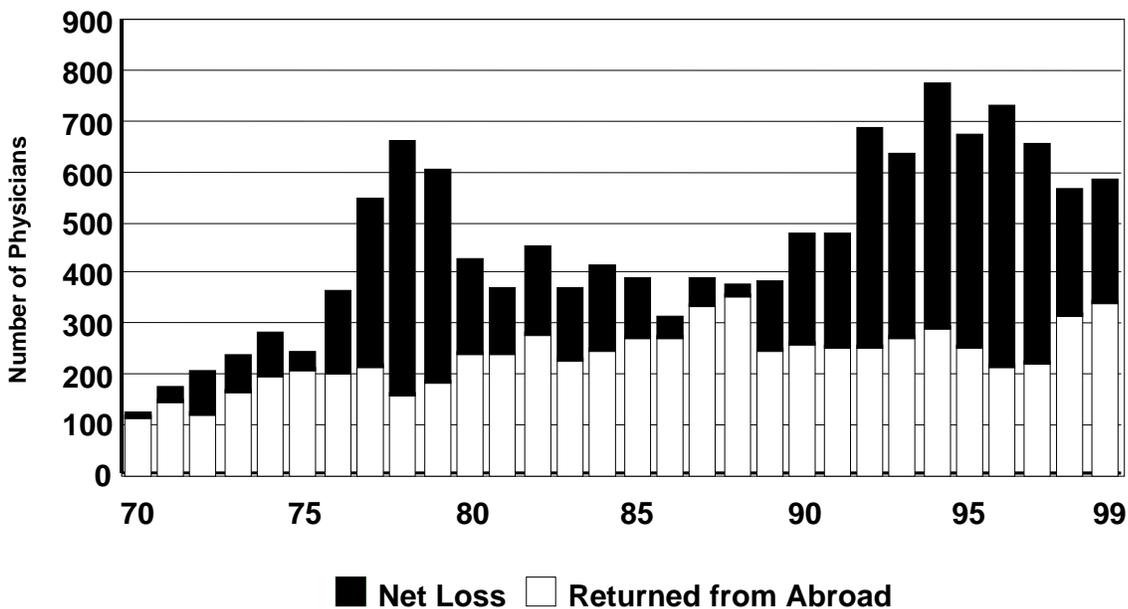
specialties and the complexity and changing nature of medical knowledge and advancing technologies.

**PHYSICIAN MIGRATION**

The routes for entry and exit from the physician supply pool in Canada are varied and no one data source captures the data in a fully accurate manner. Barer and Webber (1999) provide a very detailed discussion of the routes to entry/exit to/from practice in Canada and the associated data sources in their paper *Immigration and Emigration of Physicians to/from Canada* which was presented at the International Physicians’ Workforce Conference, San Francisco, 1999. We suggest that paper be reviewed for a full description of the issue, while this paper will present a summary of the physician emigration and immigration levels and the relevant demographic and practice characteristics of those physicians.

Physician immigration and emigration continues to have an impact on physician supply in Canada. Data on the migration of Canadian physicians for the past three decades indicate a cyclical pattern with peaks in the number of physicians leaving the country in the late 1970s and mid-1990s. The peak in the number of physicians who emigrated from Canada in the 1970s occurred over a three year period 1977 to 1979, while the peak in the 1990s was sustained over a longer period of time - 1992 to 1999. The number of physicians who subsequently returned to Canada from abroad was relatively constant at about 200-250 physicians per year through the 1980s and 1990s, however there were peaks in 1987, 1988 and 1998 and 1999 when over 300 physicians returned to practice in Canada in each of these years. The net loss of physicians over the last decade was the highest in 30 years (Figure 8).

**Figure 8: Physicians who moved abroad and returned from abroad, Canada, 1970 to 1999**



Source: SMDB, CIHI

Another mode of entry to practice in Canada is through the immigration process, either as a landed immigrant (with or without pre-arranged employment) or on a temporary employment authorization. The number of physicians entering Canada as landed immigrants dropped significantly in the mid 1970s from over 1,000 physicians to about 261 in 1979. Throughout the 1980s and 1990s the numbers have fluctuated between approximately 200 to 500 physicians per year, with peaks of 462 in 1982 and 525 in 1992. Since 1992, the number of physicians entering Canada with landed immigrant status decreased.

### **Physician characteristics - emigration**

In general, the number of physicians leaving the country make up less than one to two percent of the total physician supply in Canada and approximately 30% of those physicians who leave Canada are International Medical Graduates (IMGs). Typically the majority (approximately 70%) of the physicians moving out of the country are younger, especially Canadian graduates, and have practised for less than 15 years, while about 25% have practised for 15 to 30 years.

### **Physician characteristics – returning to practice in Canada**

Of physicians returning to practice in Canada, most (80%) are Canadian graduates and the majority (65%) are specialist physicians. Overall physicians returning to Canada usually have practiced for less than 15 years; Canadian graduates are younger and constitute the greatest proportion of returnees, while foreign educated physicians tend to have more than 15 years practice experience.

### **FUTURE SUPPLY**

Research by the Association of Canadian Medical Colleges in the early 1990s suggested that a reduction in medical school enrolment would reduce future physician supply which would compromise the needs of a growing population.<sup>13</sup> As part of this research, a basic approach to projecting future supply (assuming 35 year career) showed that by 2008, the number of retirees would exceed the number of medical school graduates.

The Canadian Medical Association (CMA) expanded on the work of the Association of Canadian Medical Colleges by building a projection template (Physician Resource Evaluation Template) to incorporate the key parameters in estimating physician supply over the two decades and enable planners to create various scenarios to test the effects on future supply.<sup>14</sup>

The model uses three main categories of variables to determine the size of the practising population: base stock, exits and entrants. Census data from Statistics Canada is used to determine physician to population ratios. The base stock includes all physicians who were licensed to practice in Canada as of January 1999 and had a valid Canadian address. Physicians are removed from this active pool due to retirement, death and emigration. New physicians are added each year based on the number of physicians who will have completed postgraduate training, those that return from abroad to active practice and those that are actively recruited for permanent employment from overseas. Additions and deletions to supply are done on an age/sex specific basis.

The model provides a projection estimate of future supply by age group, sex and broad specialty of the physician for the years 2000 to 2021. Full-time equivalents (FTEs) are estimated at the same level of detail by applying age/sex/broad specialty specific FTE to physician ratios to the projected head counts of each year. The FTE calculation is based on fee-for-service billings relative to a set of predetermined specialty and province specific benchmarks.<sup>15</sup>

The Physician Resource Evaluation Template has been used by both the medical community and within government to test various scenarios of physician supply. It allows the user to proxy situations such as increased output of medical schools, effects of early retirement packages, and increased or decreased emigration. The model not only shows the effect of these different scenarios on the overall supply but gives the planner a means to see to what extent a variable must change to affect overall supply. It also shows the strengths of variables that cannot change, such as the aging of the current active stock, in determining future supply.

Each year the model is rebased with the current stock and updated with the latest available information for each of the exit and gain variables. The CMA typically releases a “status quo” scenario that depicts what the future may look like if things remain as they are today. This does not make it a probable future only a possible future. It is very unlikely the future will unfold as predicted by the status quo scenario. It would be unreasonable in every sense to presume that there would not be a single policy or societal change that would affect physician supply over the next 5, 10 or 20 years.

The 1999 status quo scenario projected a steady decrease in the number of physicians per 1000 population from 1.82 in 1999 to 1.39 by 2021. However, there were significant changes that occurred during 1999 and early 2000 that will have an impact on both the supply of physicians and the number of people they will be servicing. Announced increases in both undergraduate (121) and postgraduate (74) training positions will impact on future supply, and revisions made to population projections has reduced future estimates from gains of approximately 300,000 per year to about 250,000 per year. Both these factors have a substantial impact on the physician to population ratio of the future.

In January 2000 some custom scenarios were produced for the Federal/Provincial/Territorial Advisory Committee on Health Human Resources, to examine the effect of actual and proposed domestic training increases as well as changes in emigration and immigration. These scenarios also used the revised population projections.

Four “possible futures” which were examined are described here as Scenarios A through D. It is important to note that the model does not, at present, allow for an increase or decrease to immigrant physicians who are recruited to Canada with only a temporary work permit or license. The primary reason this has not been incorporated in the model is the difficulty in collecting reliable information that can be validated to ensure no double counting of the same physician. For example, a temporary license may be issued but the physician is already practising in Canada under a previous temporary license and therefore is already

counted in the supply. To proxy scenarios whereby the volume of these physicians would increase, the permanent recruitment variable, ie. those graduates of foreign medical schools with pre-arranged permanent employment, is increased.

#### *Scenario A*

Emigration and physicians returning from abroad are essentially unchanged compared with 1987/97 average annual figures. Immigration numbers would be equal to recruited landed immigrant numbers from 1987/97. New visa and other immigrant physicians are not included in these projections although many will already be present in the base stock.

#### *Scenario B*

Emigration of physicians is increased and those returning from abroad declines relative with today. Contributions to physician supply from immigration sources would approximate recruited landed immigrant numbers plus an estimate of the number of recruited visa physicians who entered the country from 1987/97. It is assumed in this scenario that other immigrant physicians would not add to the practising pool.

#### *Scenario C*

Emigration and physicians returning from abroad are essentially unchanged compared with 1987/97 average annual figures. Contributions to physician supply from immigration sources would approximate the numbers of recruited landed immigrants, and other visa and immigrant physicians from 1987/97.

#### *Scenario D*

Emigration of physicians decreases and more physicians return from abroad compared with 1987/97 average figures. Contributions to physician supply from immigration sources would increase over numbers of recruited landed immigrants, and other visa and immigrant physicians from 1987/97.

#### *Results*

The four scenarios are presented in Table 2 with historical data on the numbers of physicians leaving Canada, returning from abroad and entering the country through the three most common immigration routes. These are recruited landed immigration, recruitment to work on a visa, and on-recruited landed immigrants.

Table 2 also shows the projected number of physicians per 1000 population for each scenario in combination with a 5%, 7%, and 12% increase in medical school enrolment over 1998 levels.

The four scenarios (or “possible futures”) produce a range of physician to population ratios that bracket the current level of 185 physicians per 100,000.

If all four scenarios are equally probable, a total national increase in enrolments of 7-12% over 1998 levels would likely produce 191-194 physicians/100,000 population in 2021, a range slightly higher than today.

The only scenario showing significantly fewer physicians per population than now is Scenario A which basically reflects the current situation in Canada, less any increases for temporary work arrangements such as those that have been used to recruit to rural areas. Although this scenario may accurately reflect the projections of permanent physician supply it is not likely that Canada will ever be in a position where there would be no temporary work permits issued to foreign trained physicians.

**Table 2: Physician resource planning scenarios, Canada**

History and Scenarios	Canadian/Permanent Resident Physicians		Immigrant and Recruited Physicians			Projected Physicians/100,000 pop in 2021 <sup>1</sup>		
	Emigration	Returns to Practice From Abroad	Recruited Landed Immigrant Physician	Recruited Visa Foreign Worker Physician <sup>2</sup>	Non-Recruited Landed Immigrant Physician <sup>3</sup>	5% increase over 1998 enrolment levels	7% increase over 1998 enrolment levels	12% increase over 1998 enrolment levels
1987 - 1997 Annual Average <sup>4</sup>	570	273	116	399	285			
1987 - 1997 Range	377 - 777	218 - 360	57 - 184	203 - 790	215 - 364			
Scenario A	600	250		100		160	161	164
Scenario B	700	200		500		175	176	179
Scenario C	600	300		700		198	199	202
Scenario D	500	400		1000		227	228	231

<sup>1,2</sup> May include fellows

<sup>3</sup> Not necessarily licensable but proposed changes to the Immigration Act may increase these numbers significantly

<sup>4</sup> Includes estimated figures for recruited and non-recruited landed immigrants for year 1990.

Sources: CIHI (Southam Medical Database) for emigration and returning from abroad figures; Citizenship and Immigration Canada for recruitment and emigration data (1997 most recent available); Canadian Medical Association Physician Resource Evaluation Template (1999) for projected numbers.

## SELECTED POLICY ISSUES

### Overseas recruitment

Overseas recruitment has been used by hospitals, communities, physicians and provincial governments to bring physicians to areas of need where recruitment efforts have failed to attract a qualified Canadian or permanent resident physician. This has been a longstanding practice to address what would appear to be an intractable problem. Immigration data appear to indicate a surge of foreign recruitment in 1997. While the data may be difficult to interpret accurately, the magnitude of the change between 1990-95 (average of 365) and 1997 (790) cannot be ignored. It is anticipated that primary care reform will improve the distribution of physicians and may alleviate some of the need for foreign recruitment of general practitioners. However, it is unlikely that these reforms will be implemented

suddenly and completely. As a consequence, there is little reason to suspect that overseas recruitment will decline precipitously in the near future.

### **Changes to the Immigration Act**

The federal government introduced amendments to the *Immigration Act* in Spring 2000 which will lift the current immigration restrictions on physicians, as an occupational group. These restrictions were first introduced in 1974 to curb growth in physician numbers. Lifting the restrictions is expected to prompt increased immigration of physicians to Canada. It is unlikely that physicians entering Canada through this route will all be licensable here but their increasing presence will likely put greater pressure on licensing authorities and provincial governments to change assessment procedures and increase training opportunities so that they may gain entry to practice.

### **Licensing rules**

Licensing rules are determined by provincial medical licensing authorities under the provisions of provincial statutes. A recent decision of the British Columbia Human Rights Tribunal with regard to licensing of foreign-trained physicians suggests that licensing authorities may need to develop more sophisticated assessment of these physicians in future (in place of a near automatic refusal of licensure based on country of training). The potential result of this exercise may bring a greater acceptance of foreign credentials in future.

### **Certification of foreign-trained specialists**

In 1997, the RCPSC reached a decision to cease providing certification to specialists trained outside of North America. This decision was questioned by various provincial governments, licensing authorities and communities who indicated that the lack of opportunity for certification would complicate the recruitment of foreign-trained specialists to Canada and dissuade these individuals from coming here. The RCPSC has decided to revise its decision and gradually allow for the assessment and eventual certification of these individuals.

### **International trade agreements**

The Labour Mobility Chapter of the Agreement on Internal Trade in Canada requires provinces to comply by removing inappropriate barriers to professionals moving between provinces. Globalization and the advent of international trade agreements are also having an impact on the mobility of professionals among countries. For example, physicians are now able to move more readily among countries of the European Union to practice medicine. Developments such as these are likely to increase opportunities for physicians to move to Canada from elsewhere (and for Canadian physicians to move away if opportunities seem brighter elsewhere).

## GLOSSARY

### *College of Family Physicians of Canada (CFPC)*

The CFPC reviews and accredits residency training programs in family medicine. Graduates of the family medicine program may qualify for the certification examination in that discipline. Continuing medical education is mandatory for remaining a member.

### *Canadian Medical Forum (CMF)*

Membership of the Canadian Medical Forum consists of the following: Canadian Medical Association, Association of Canadian Medical Colleges, Royal College of Physicians and Surgeons of Canada, College of Family Physicians of Canada, Canadian Association of Internes and Residents, Canadian Federation of Medical Students, Association of Canadian Teaching Hospitals, Medical Council of Canada, and the Federation of Medical Licensing Authorities of Canada.

### *National Coordinating Committee on Postgraduate Medical Education (NCCPMT)*

The membership of the NCCPMT is comprised of representatives of the national medical organizations that make up the Canadian Medical Forum (CMF) and the Working Party on Physician Resources of the Federal/Provincial/Territorial Advisory Committee on Health Human Resources. Co-chairs are appointed from the CMF and the provincial/territorial governments.

### *Royal College of Physicians and Surgeons of Canada (RCPSC)*

The RCPSC ensures that specialists in medicine and surgery are properly trained and qualified. The RCPSC prescribes training requirements for 53 medical, laboratory and surgical specialties and subspecialties; accredits specialty training programs in Canada; judges the acceptability of training taken within Canada; and conducts certifying examinations.

In Quebec, certification and licensure is the responsibility of the Collège des médecins du Québec.

### *Southam Medical Database (SMDDB)*

The Southam Medical Database (SMDDB) contains information on physicians in Canada and is maintained by Southam Business Lists. Southam Business Lists uses the database to produce the Canadian Medical Directory and mailing lists for commercial purposes. The Canadian Institute of Health Information purchases copies of this database each year. The data base is updated on a weekly basis using information received from provincial licensing bodies, medical schools, certifying organizations, etc.

#### Medical specialties

Medical specialties include internal medicine (and subspecialties), medical genetics, dermatology, neurology, paediatrics, physical medicine & rehabilitation, psychiatry, public health, emergency medicine, occupational medicine, anaesthesia, nuclear medicine, diagnostic radiology, therapeutic radiology.

#### Laboratory specialties

Laboratory specialties include medical biochemistry, medical microbiology, and pathology.

### Surgical specialties

Surgical specialties include general surgery cardiovascular & thoracic surgery, neurosurgery, obstetrics/gynaecology, ophthalmology, otolaryngology, orthopaedic surgery, plastic surgery and urology.

### *Undergraduate education*

Undergraduate medical education consists of a four year program at one of the 16 accredited faculties of medicine. Graduates are awarded an undergraduate degree in medicine but cannot become licensed practitioners without completion of postgraduate training.

### *Postgraduate training*

Graduates of Canadian medical schools must complete a program of postgraduate training in order to qualify for licensure and certification. Trainees (called residents) complete a minimum of two years for family medicine and 4-7 years for medical and surgical specialties.

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