What are the facts concerning the number of residency positions in Canada?

Dale Dauphinee, MD; Dianne Thurber, MA

Abstract

Some physicians think the current squeeze facing postgraduate medical education was caused by cuts in the number of residency positions. The authors consulted the Canadian Post-MD Education Registry database to determine the actual state of postgraduate training opportunities and to correct erroneous views that may be affecting the debate over training positions. The danger, they say, is that misinformation may lead to inappropriate strategies for dealing with current challenges.

Résumé

Des médecins pensent que les restrictions actuelles auxquelles fait face l'éducation médicale postdoctorale sont attribuables à la diminution du nombre de postes de résidence. Les auteurs ont consulté la base de données du Système informatisé sur les stagiaires post-MD en formation clinique pour faire le point sur les possibilités de formation postdoctorale et corriger les opinions erronées qui peuvent biaiser le débat sur les postes de formation. Ils affirment que le danger, c’est que l’information erronée risque d’entraîner l’élaboration de stratégies qui ne conviennent pas pour relever les défis actuels.

The last decade has seen major changes in physician-resource policies and medical-licensure requirements in Canada. These include adoption of a requirement for a minimum of 2 years' postgraduate training and certification prior to licensure by most medical-licensing authorities and the development of 2 tracks to licensure, first by Quebec and then by other provinces. As well, the Quebec government intervened directly in setting needs-based targets for postgraduate-training positions in the late 1980s, and in the aftermath of the Barer-Stoddart report of 1991 significant cuts were made to medical-school enrollment across the country. Those cuts were part of an attempt by provincial governments to control health care costs by reducing the number of physicians.

The consequences of these decisions, which are still evolving, are obvious. The flexible component of postgraduate medical education is gone, eliminated by the switch from a minimum of 1 year of prelicensure training to a 2-year minimum. Training positions were reallocated to cover the new 2-year requirement, but there was still an abrupt 5% to 10% increase in demand for spots because new physicians no longer had the option of "a year or two in practice" before pursuing specialty training.

Although this sequence of events has led to inflexibility within our system, there is an erroneous perception that the current squeeze affecting training positions is due, wholly or in part, to a reduction in the number of residency positions since 1992. This impression may be the result of 2 coincidental but unrelated events: the demand for positions related to the 2-year prelicensure requirement, and public discussions over the need to reduce the size of the medical workforce. Many have assumed that residency posi-
tions have also been cut, leading to inflexibility within the postgraduate training system. Data show that this view is erroneous.

What are the facts?

The number of current-year graduates entering first-year postgraduate (PGY-1) training declined by 2%, from 1683 to 1646, between 1988 and 1995 (see Table 1). The major factor determining the size of this group is the number of undergraduate medical students receiving a medical degree in Canada.

The number of re-entry trainees dropped by 40% between 1988 and 1995 because most government-funded residency positions were needed to provide the training required for certification and licensure for new graduates of Canadian medical schools. Almost all current re-entry trainees began to practise when a rotating internship was considered to provide adequate prelicensure training. These former graduates of Canadian medical schools tend to seek specialty education after having spent some time in general practice. Although there will always be practising physicians who wish to change career paths, future demand for these positions will decrease, since all of today's graduates will have completed their specialty training before being licensed.

Since there are fewer current-year graduates, one would expect a decrease in the number of government-funded training positions available for graduates of Canadian schools, had all other aspects of the training system remained stable. However, the move to 2 years of prelicensure training and decisions by some provinces to increase the proportion of specialty trainees have caused an increase in the number of government-funded positions required by Canadian graduates.

The ratio of government-funded positions/current-year graduates indicates the proportion of training positions used by all Canadian postgraduate trainees to those used by current-year graduates. The change to a 2-year prelicensure requirement (in 1989 in Quebec and in 1993 in the rest of Canada) resulted in an increase in this ratio. The proportion of positions allocated for specialty training also increased, resulting in a need for more positions for post-MD training and thus increasing the ratio. In the opposite direction, the shift toward direct entry into specialty training resulted in a shortening of post-MD training for specialties that do not require a broad-based clinical-training year. This could be expected to decrease the ratio.

The need for extra training positions for Canadian graduates has led to a steady decrease (42%) in the number of government-funded positions available for graduates of foreign medical schools.

There are several types of “government-funded” positions. Provincial governments may fund positions within their own medical schools, or transfer postgraduate training funds to another province. Other positions use dedicated provincial funds or funds from the federal government, such as the money the Department of National Defence provides to train military physicians. The total number of government-funded post-MD trainees decreased by only 1% between 1988 and 1995.

Different perspectives

Although the number of government-funded training positions in proportion to the number of entry-level

<table>
<thead>
<tr>
<th>Training year</th>
<th>Current-year Canadian graduates in PGY-1 positions</th>
<th>Canadian graduates</th>
<th>Ratio: Canadian graduates/current-year graduates</th>
<th>Re-entry trainees</th>
<th>International medical school graduates</th>
<th>Total government-funded positions*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988</td>
<td>1683</td>
<td>5972</td>
<td>3.5:1</td>
<td>677</td>
<td>981</td>
<td>6953</td>
</tr>
<tr>
<td>1989</td>
<td>1641</td>
<td>5992</td>
<td>3.7:1</td>
<td>671</td>
<td>966</td>
<td>6958</td>
</tr>
<tr>
<td>1990</td>
<td>1632</td>
<td>5895</td>
<td>3.6:1</td>
<td>644</td>
<td>907</td>
<td>6802</td>
</tr>
<tr>
<td>1991</td>
<td>1610</td>
<td>5823</td>
<td>3.6:1</td>
<td>651</td>
<td>916</td>
<td>6739</td>
</tr>
<tr>
<td>1992</td>
<td>1646</td>
<td>5877</td>
<td>3.6:1</td>
<td>615</td>
<td>904</td>
<td>6781</td>
</tr>
<tr>
<td>1993</td>
<td>1589</td>
<td>5937</td>
<td>3.7:1</td>
<td>632</td>
<td>905</td>
<td>6842</td>
</tr>
<tr>
<td>1994</td>
<td>1582</td>
<td>6092</td>
<td>3.9:1</td>
<td>489</td>
<td>704</td>
<td>6796</td>
</tr>
<tr>
<td>1995</td>
<td>1646</td>
<td>6327</td>
<td>3.8:1</td>
<td>403</td>
<td>572</td>
<td>6899</td>
</tr>
</tbody>
</table>

* Government-funded positions comprise regular ministry-funded positions, those funded by the transfer of provincial government funds between provinces, dedicated provincial government funds (e.g., neonatal program funds in Ontario) and federal government funds (National Defence and Medical Research Council).

Source: CAPER annual census, 1988-95

---

Dauphinee and Thurber

---

Table 1: Trends in postgraduate medical education, 1988-95
Canadian graduates has increased, all participants in the postgraduate training system are feeling squeezed.

Since the acceptance of the Barer–Stoddart report, provincial governments have tried to cut the number of residency-training positions by 10% in order to lower costs by reducing the number of physicians trained in Canada. However, the number of positions required to provide the decreasing number of Canadian graduates with full training to licensure has actually increased. Why?

One reason is that the rules for postgraduate training changed when it was decided that certification by either the College of Family Physicians of Canada (CFPC) or the Royal College of Physicians and Surgeons of Canada would be the basic requirement for portable licensure between provinces. This meant that about 50% of new graduates who were going into general practice now needed an additional year of training, leading to demand for about 14% more posts for Canadian graduates alone.

The initiation of physician-resource planning across Canada was another factor. Although the general goal was a 50-50 mix of generalists and specialists, in most provinces more than 50% of working physicians were in general practice or family medicine. Accordingly, in order to approach the 50-50 mix, the number of new graduates entering specialty training increased, and so did the requirement for training that lasted 4 to 6 years. Having a greater proportion of trainees seeking specialization, when combined with the shift to 2 years' prelicensure training for family physicians, resulted in a need for more positions to allow training to licensure for all new Canadian graduates of Canadian schools.

The changes in training requirements within the last 3 years have also resulted in an upheaval in faculties of medicine and hospitals that provide residency training. Eliminating the rotating internship reduced the number of trainees available in teaching hospitals, since much of the required 2 years' prelicensure training in family medicine now takes place in community-based sites.

Faculties of medicine were asked to accomplish all this within existing or decreasing budgets and with a fixed number of training positions. Furthermore, all faculties were required to provide enough PGY-1 positions for their current-year graduates. This was done against a background of ongoing hospital closures and cutbacks in nursing staff.

Although, in effect, there has been no decrease in the number of government-funded postgraduate-training positions, current trainees have watched the rules change from the time they entered medical school. Licensure requirements have resulted in a major restriction of flexibility in what and where new graduates study, and physician-resource-planning initiatives restrict their interprovincial mobility and choice of practice locations.

From 1988 to 1995 there was a slight decrease in the number of government-funded residency positions available, but the number of government-funded posts actually increased by 2.5% from 1991 to 1995 — exactly when access to PGY-1 positions and the postgraduate system became more difficult because of the prelicensure changes. At the same time, the availability of positions for graduates of foreign schools and re-entry physicians was greatly compromised.

**Trends to watch**

First, the impact of reduced medical-school enrolment will be seen in 1997, when the first of the smaller medical classes graduates. If provincial ministries decide to make proportional cuts in the number of postgraduate positions, then the tight situation will persist; if not, some flexibility could be reintroduced.

Second, the certifying bodies are considering changes that may affect training. The Royal College’s Maudsley report, for instance, raises issues such as a new emphasis on general aspects of specialty training and the base specialties in training programs, and more flexible approaches to postgraduate training. For its part, the CFPC is developing new objectives for postgraduate programs, including allowing additional training for extended roles in family medicine in some of its programs. Such changes will require close observation.

**Conclusion**

The face of health care is changing throughout the Western world, and Canada is no exception. The changes that have transformed prelicensure training here have meant that everyone using the system has had to adjust. It is clear that graduates of foreign schools and Canadian-trained physicians seeking retraining have been affected the most, while new graduates entering the system find there is much less flexibility than in the past. They can still get training, but it may not be the training they want.

It is essential that discussions and decisions be based on valid facts and knowledge of the whole system. The current problems and strains facing residency training are no exception. We hope that future efforts to improve residency training will be based on the best evidence available.

**References**
