Tracking postgraduate practice entry cohorts – a good news story for Canada.

The postgraduate training practice entry cohort is defined as graduates of Canadian medical schools (GCMS) and international medical graduates who exited Canadian postgraduate residency programs (for the first time) at a level consistent with completion of training. This analysis is restricted to GCMS and is based on information contained in the 2013-2014 Annual Census of Post-MD Trainees published by the Canadian Post-MD Education Registry as well as custom tables resulting from tracking locations using the CMA Masterfile.

Tracking practice entry cohorts
Within two years of exiting, 12% of the 1995 practice entry cohort could not be located in Canada (see graph 1). This was a period when Canada was also losing 600 to 700 practising physicians a year, primarily to the United States. Fortunately, the retention of the 1995 cohort did not further diminish at the 5, 10, 15 year mark, remaining at about 88% being located in Canada. As the number of practising physicians heading south lessened, so did the movement of new physicians. By the 2000 practice entry cohort, 94% were in Canada two years after completing training and this only fell to 91% by 2010, i.e. ten years post exit. (See graph 2).

Graph 1: Percentage of 1991 to 1995 postgraduate practice entry cohorts practising in Canada 2, 5, 10, 15 and 20 years after completing training
While the retention of the 2002 to 2004 practice entry cohorts after two years was not ideal (90-91%), none matched the loss rate of 1995. These three cohort years actually exhibited higher retention at the five year mark than after two years.

By the 2005 cohort, Canada had retained 93% of the practice entry cohort group two years later. Similarly, 95% of the 2008 group still had Canadian addresses after two years in practice.

Given the length of the time series available, practice entry cohorts from the early 1990s have been tracked for up to 20 years. Even at that point, Canada held on to about 85% of the 1991, 1992 and 1993 groups of new physicians. Losses from the original cohort may be due to migration, early retirement, death, or simply no valid Canadian address in the data system.

**Retention of practice entry cohorts in region of education or training**

It is interesting to examine (again for GCMS only) the retention of these doctors not just within Canada but within regions of Canada both from the perspective of where they received their undergraduate medical degree and where they completed their postgraduate medical training. For this, the practice location in 2013 of the 2011 postgraduate exit cohort is used. Postgraduate exits include the new practice entry cohort plus any physicians who re-entered postgraduate programs for additional training.
For all regions of Canada, retention was higher based on where postgraduate training was done than where undergraduate training was completed. (see graph 3). This means, for instance, that while a physician may have done their undergraduate medical education in their home province, their move to another region to complete postgraduate training is more likely to be where they set up practice, at least initially. This seems to be particularly true in Atlantic Canada where they retained 60% of the graduates of the Dalhousie and Memorial medical schools but 77% of those that completed training in the Atlantic region.

Retention of new physicians within the region where they completed their postgraduate training is highest among those who finished training in the west with 83% retention in that region. Quebec and Ontario retention rates were the same at 80%.

**Graph 3: Retention of new physicians by region of undergraduate and postgraduate education**

<table>
<thead>
<tr>
<th>Region</th>
<th>Retention of undergrad</th>
<th>Retention of postgrad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlantic</td>
<td>60%</td>
<td>77%</td>
</tr>
<tr>
<td>Quebec</td>
<td>76%</td>
<td>80%</td>
</tr>
<tr>
<td>Ontario</td>
<td>76%</td>
<td>80%</td>
</tr>
<tr>
<td>Western</td>
<td>81%</td>
<td>83%</td>
</tr>
</tbody>
</table>

Note: GCMS only but includes both new entry and re-entry.

So while retention of physicians who have recently completed postgraduate training can vary by region, on the whole it would appear that Canada has been largely successful in keeping the graduates of Canadian medical schools practising in this country.

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