Cardiovascular/Thoracic Surgery Profile
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GENERAL INFORMATION

For purposes of presenting the data provided in the National Physician Survey (NPS), the specialties of cardiac surgery and thoracic surgery are combined (and will henceforth be referred to as CVT surgery). However, The Royal College of Physicians and Surgeons of Canada separate these specialties for certification purposes and as such, the following description and training requirements appear for both.

**Cardiac Surgery** is the area of surgery that deals with diseases of the pericardium, heart and vessels. Procedures that are performed include coronary artery bypass, valve repair or replacement, heart transplantation, replacement of the aorta, pulmonary thromboendarterectomy and procedures to correct congenital abnormalities. It is a demanding, technical specialty that is very diverse. It exposes practitioners to a wide variety of medical problems and requires them to interact often with other physicians including the operating room team comprised of specialized nurses, technicians and anesthetists.

Source: Pathway evaluation program
GENERAL INFORMATION

After completing medical school, there are three pathways one can take to become certified in cardiac surgery that include 6 years of approved residency training in the disciplines of core general surgery, cardiac, vascular and thoracic surgery.

Thoracic surgery is the branch of surgery concerned with congenital and acquired diseases of the chest wall, mediastinum, lungs, trachea, pleura, esophagus and diaphragm. After completing medical school, to become certified in thoracic surgery requires that you first obtain Royal College Certification in general surgery, cardiac surgery, or enrolment in a Royal College-approved training program in these areas. All candidates must be certified in their primary specialty in order to be eligible to write the Royal College certification examination in thoracic surgery.

For further details on training requirements please go to:

Royal College of Physicians and Surgeons of Canada
GENERAL INFORMATION

CVT surgeons have a great deal of direct patient contact, which can be viewed as a positive aspect of this specialty. While patients are often seriously ill, treatment can result in immediate and dramatic improvement. It involves long and irregular hours, which can take its toll on the physician’s personal lifestyle. Life-and-death situations and emergencies requiring rapid, critical decisions are major causes of pressure within this specialty.

For further details on training requirements please go to:

Canadian Cardiovascular Society

Source: Pathway evaluation program
Total number & number/100,000 population by province, 2016

<table>
<thead>
<tr>
<th>Province/Territory</th>
<th>Physicians</th>
<th>Phys/100k pop'n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newfoundland/Labrador</td>
<td>7</td>
<td>1.3</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>14</td>
<td>1.5</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>7</td>
<td>0.9</td>
</tr>
<tr>
<td>Quebec</td>
<td>73</td>
<td>0.9</td>
</tr>
<tr>
<td>Ontario</td>
<td>146</td>
<td>1.1</td>
</tr>
<tr>
<td>Manitoba</td>
<td>13</td>
<td>1.0</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>9</td>
<td>0.8</td>
</tr>
<tr>
<td>Alberta</td>
<td>39</td>
<td>0.9</td>
</tr>
<tr>
<td>British Columbia</td>
<td>46</td>
<td>1.0</td>
</tr>
<tr>
<td>Territories</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>CANADA</strong></td>
<td><strong>354</strong></td>
<td><strong>1.0</strong></td>
</tr>
</tbody>
</table>

Source: 2016 CMA Masterfile
Number/100,000 population, 1995 to 2016

Source: 2016 CMA Masterfile
Number by gender & year, 1995 to 2016

Source: 2016 CMA Masterfile
Percentage by gender & age, 2016

**Gender**
- Male: 89%
- Female: 11%

**Age Group**
- <35: 2%
- 35 - 44: 22%
- 45 - 54: 31%
- 55 - 64: 27%
- 65+: 18%

Source: 2016 CMA Masterfile
Number by gender & age, 2016

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;35</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>35-44</td>
<td>12</td>
<td>63</td>
</tr>
<tr>
<td>45-54</td>
<td>10</td>
<td>96</td>
</tr>
<tr>
<td>55-64</td>
<td>12</td>
<td>81</td>
</tr>
<tr>
<td>65+</td>
<td>3</td>
<td>57</td>
</tr>
</tbody>
</table>

Source: 2016 CMA Masterfile
Percentage by main work setting, 2014

<table>
<thead>
<tr>
<th>Work Setting</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Health Sciences Centre</td>
<td>64%</td>
</tr>
<tr>
<td>Community Hospital</td>
<td>12%</td>
</tr>
<tr>
<td>Non-AHSC Teaching Hospital</td>
<td>11%</td>
</tr>
<tr>
<td>Free-standing Lab/Diag Clinic</td>
<td>3%</td>
</tr>
<tr>
<td>Free-standing Walk-in Clinic</td>
<td>3%</td>
</tr>
<tr>
<td>Private Office/Clinic</td>
<td>3%</td>
</tr>
<tr>
<td>University</td>
<td>1%</td>
</tr>
</tbody>
</table>

Source: 2014 National Physician Survey. CFPC, CMA, Royal College
Percentage by practice organization, 2014

- Solo Practice: 72%
- Group Practice: 13%
- Interprofessional Practice: 13%
- Hospital-based Practice: 2%
- NR: 0%

Source: 2014 National Physician Survey. CFPC, CMA, Royal College
### Hours worked per week (excluding on-call), 2014

<table>
<thead>
<tr>
<th>Activity</th>
<th>Hours worked per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct patient care without teaching component</td>
<td>30.6</td>
</tr>
<tr>
<td>Direct patient care with teaching component</td>
<td>14.2</td>
</tr>
<tr>
<td>Teaching without patient care</td>
<td>4.0</td>
</tr>
<tr>
<td>Indirect patient care</td>
<td>6.1</td>
</tr>
<tr>
<td>Health facility committees</td>
<td>1.3</td>
</tr>
<tr>
<td>Administration</td>
<td>3.6</td>
</tr>
<tr>
<td>Research</td>
<td>2.8</td>
</tr>
<tr>
<td>Managing practice</td>
<td>3.4</td>
</tr>
<tr>
<td>Continued professional development</td>
<td>3.2</td>
</tr>
<tr>
<td>Other</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>TOTAL HOURS PER WEEK</strong></td>
<td><strong>69.6</strong></td>
</tr>
</tbody>
</table>

Source: 2014 National Physician Survey. CFPC, CMA, Royal College
On-call duty hours per month, 2014

- Up to 120 hrs/month: 29%
- More than 120, up to 180 hrs/month: 22%
- More than 180, up to 240 hrs/month: 22%
- More than 240 hrs/month: 2%
- No response: 2%

Time spent on call in direct patient care = 49 hrs./month

Source: 2014 National Physician Survey. CFPC, CMA, Royal College
Percentage by remuneration method

Primary payment method\(^1\) in 2013

- 50% 90% + fee-for-service
- 28% 90% + salary
- 10% 90% + other* 90% + other*
- 8% Blended
- 5% NR

* Other includes capitation, sessional, contract and other methods

Average gross fee-for-service payment per physician for Cardiovascular/Thoracic surgery in 2014/15 (those earning at least $60,000) = $488,183\(^2\)

Average percent overhead reported by all surgeons in 2010 = 28.4%\(^3\)

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\(^1\) National Physician Survey, 2013, CFPC, CMA, Royal College
\(^2\) National Physician Database, 2014/15, CIHI
\(^3\) National Physician Survey, 2010, CFPC, CMA, Royal College
Professional & work-life balance satisfaction, 2013

Balance of personal & professional commitments

- Dissatisfied or very dissatisfied: 10%
- Neutral: 35%
- Satisfied or very satisfied: 22%
- NR: 33%

Current professional life

- Dissatisfied or very dissatisfied: 10%
- Neutral: 17%
- Satisfied or very satisfied: 53%
- NR: 21%

Source: 2013 National Physician Survey. CFPC, CMA, Royal College
Number of retirees during the three year period of 2013-2015

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>34 and Under</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35-44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45-54</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>55-64</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>65 and over</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: CMA Masterfile – year over year comparisons
Note: “Retired” is based on giving up licence and therefore excludes those who have retired from clinical practice but are still licensed; those younger than 45 may include physicians who have temporarily given up their licence but return to practice at a later date.
### Total & Ministry funded postgraduate MD trainees in 2014/15

<table>
<thead>
<tr>
<th>Faculty of Medicine</th>
<th>Ministry funded</th>
<th>Total</th>
<th>Faculty of Medicine</th>
<th>Ministry funded</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUN</td>
<td>0</td>
<td>0</td>
<td>McMaster U</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Dalhousie U</td>
<td>3</td>
<td>7</td>
<td>UWO</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>U Laval</td>
<td>3</td>
<td>9</td>
<td>NOSM</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>U Sherbrooke</td>
<td>0</td>
<td>0</td>
<td>U Manitoba</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>U Montréal</td>
<td>4</td>
<td>9</td>
<td>U Sask</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>McGill U</td>
<td>5</td>
<td>13</td>
<td>U Alberta</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>U Ottawa</td>
<td>6</td>
<td>9</td>
<td>U Calgary</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Queens U</td>
<td>0</td>
<td>0</td>
<td>UBC</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>U Toronto</td>
<td>5</td>
<td>30</td>
<td>Canada</td>
<td>50</td>
<td>125</td>
</tr>
</tbody>
</table>

*Includes Thoracic Surgery (Cardiac Surg.)*

Source: 2014/15 Annual Census of Post-MD Trainees, CAPER
First year & exiting postgraduate-MD trainees in 2014/15

First year Postgrad exits

Female Male

IMG GCMS

IMG – International Medical Graduates
GCMS – Graduates of Canadian Medical Schools
Postgraduate-MD trainees in 2014/15

- Total of 11 first year Cardiac Surgery trainees representing 22% of all Cardiovascular/Thoracic Surgery trainees.
- Total of 50 Cardiac Surgery trainees representing 0.4% of all Ministry funded trainees.
- Total of 64 visa trainees in Cardiac Surgery.
- Total of 10 Cardiac Surgery trainees completed postgraduate training in 2014.

Source: 2014/15 Annual Census of Post-MD Trainees, CAPER
Location of 2013 postgraduate-MD exits in 2015

Of the 6 exits in 2013, 4 (67%) were known to be practising in Canada

Source: 2014/15 Annual Census of Post-MD Trainees, CAPER
Stress associated with finding employment at end of residency

**Source:** 2012 National Physician Survey of residents. CFPC, CMA, Royal College
Links to the Organizations Supplying Information for this Document

- National Physician Survey
- Canadian Medical Association
- Association of Faculties of Medicine of Canada
- Royal College of Physicians and Surgeons of Canada
- College of Family Physicians of Canada
- Canadian Institute for Health Information