MEDICAL ONCOLOGY PROFILE

Medical oncology is a subspecialty of internal medicine, is closely associated with hematology and deals with tumors occurring in all organ systems. It is a varied, multidisciplinary field involving all aspects of internal medicine and requiring clinical knowledge and skills. The discipline treats the “whole” patient. Oncologists maintain close patient contact and their patients are often seriously or terminally ill. Systemic therapy provides curative treatment for a large number of patients. Research and teaching opportunities are plentiful in this field.

The medical oncologist often coordinates the multidisciplinary care of cancer patients, including diagnosis, therapy (e.g., surgery, chemotherapy, radiotherapy and other modalities), physiotherapy, counseling, clinical genetics, palliative care and ethical questions surrounding cancer care. It also involves screening efforts for both populations and of the relatives of patients in types of cancer that are thought to have a hereditary basis such as breast cancer. A medical oncologist often has to liaise with pathologists on the exact biological nature of the tumor that is being treated.

The medical oncology resident must acquire a high degree of clinical competence in the investigation and management of patients with the spectrum of neoplastic diseases and their complications. They must incorporate an understanding of the basic scientific principles which relate to cancer and its treatment, particularly the chemical, hormonal and immunologic approaches. The resident must develop the ability to function as a specialist
consultant in an inpatient and ambulatory setting and as a part of a multidisciplinary team in cancer management. Development of expertise in the relevant investigative methods, technical skills and communicative interpersonal relationships is essential, together with skill in the collection and interpretation of data and decision-making.

Only candidates certified by the Royal College of Physicians and Surgeons of Canada in internal medicine may be eligible for the Certificate of Special Competence in medical oncology. Once certified in internal medicine, there is an additional 2 years of approved residency in medical oncology. This period must include:
- 1 year of approved clinical residency in an accredited residency program in medical oncology;
- 3 months approved residency on a radiation oncology service;
- 3 months approved residency on a hematology service unless equivalent training has been received previously.

It must also include a period of residency approved by the program director on other services which may treat specific tumor types or other aspects not otherwise included in the program.

For further information on the training requirements go to: http://www.royalcollege.ca/portal/page/portal/rc/credentials/start/routes/traditional_route

# Number of physicians and physicians/100,000 population in Medical Oncology in Canada, 2015

<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>1</td>
<td>0.7</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>13</td>
<td>1.4</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>4</td>
<td>0.5</td>
</tr>
<tr>
<td>Quebec</td>
<td>152</td>
<td>1.8</td>
</tr>
<tr>
<td>Ontario</td>
<td>197</td>
<td>1.4</td>
</tr>
<tr>
<td>Manitoba</td>
<td>12</td>
<td>0.9</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>Alberta</td>
<td>55</td>
<td>1.3</td>
</tr>
<tr>
<td>British Columbia</td>
<td>75</td>
<td>1.6</td>
</tr>
<tr>
<td>Territories</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>CANADA</strong></td>
<td><strong>517</strong></td>
<td><strong>1.4</strong></td>
</tr>
</tbody>
</table>

Source: 2015 CMA Masterfile
Physicians/100,000 population in Medical Oncology in Canada, 1995 to 2015

Source: CMA Masterfile
Medical Oncologists by gender and year in Canada, 1995 to 2015

Source: CMA Masterfile
Medical Oncologists by age and gender in Canada, 2015

Gender
- Male: 56%
- Female: 44%

Age Group
- 34 and under: 4%
- 35-44: 33%
- 45-54: 30%
- 55-64: 21%
- 65 and over: 12%
Medical Oncologists by age and gender in Canada, 2015

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>34 and Under</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>35-44</td>
<td>85</td>
<td>82</td>
</tr>
<tr>
<td>45-54</td>
<td>77</td>
<td>75</td>
</tr>
<tr>
<td>55-64</td>
<td>35</td>
<td>68</td>
</tr>
<tr>
<td>65 and over</td>
<td>13</td>
<td>47</td>
</tr>
</tbody>
</table>

Source: 2015 CMA Masterfile
Main work setting of **Medical Oncologists** in Canada, 2014

- **Academic Health Sciences Centre**: 65%
- **Community Hospital**: 14%
- **Admin/Corp office**: 9%
- **Community Clinic/Health-centre**: 5%
- **Non-AHSC Teaching Hospital**: 5%
- **University**: 3%

Source: 2014 National Physician Survey. CFPC, CMA, Royal College
Practice organization for Medical Oncologists in Canada, 2014

Source: 2014 National Physician Survey. CFPC, CMA, Royal College
Hours worked per week (excluding on-call) by Medical Oncologists in Canada, 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>19.0</td>
</tr>
<tr>
<td>Direct patient care with teaching component</td>
<td>6.6</td>
</tr>
<tr>
<td>Teaching without patient care</td>
<td>1.6</td>
</tr>
<tr>
<td>Indirect patient care</td>
<td>11.0</td>
</tr>
<tr>
<td>Health facility committees</td>
<td>1.3</td>
</tr>
<tr>
<td>Administration</td>
<td>2.9</td>
</tr>
<tr>
<td>Research</td>
<td>5.9</td>
</tr>
<tr>
<td>Managing practice</td>
<td>1.0</td>
</tr>
<tr>
<td>Continued professional development</td>
<td>2.7</td>
</tr>
<tr>
<td>Other</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>TOTAL HOURS PER WEEK</strong></td>
<td><strong>52.5</strong></td>
</tr>
</tbody>
</table>

Source: 2014 National Physician Survey. CFPC, CMA, Royal College
On-call duty hours spent per month by Medical Oncologists in Canada, 2014

- 84% Up to 120 hrs/month
- 7% More than 120, up to 180 hrs/month
- 6% More than 180, up to 240 hrs/month
- 3% More than 240 hrs/month
- 0% No response

Time spent on call in direct patient care = 17 hrs./month

Source: 2014 National Physician Survey. CFPC, CMA, Royal College
Remuneration for Medical Oncologists in Canada

Primary payment method\(^1\) in 2013

- **90% + fee-for-service**: 18%
- **90% + salary**: 38%
- **90% + other***: 32%
- **Blended**: 10%
- **NR**: 2%

* Other includes capitation, sessional, contract and other methods

Average gross clinical earnings for Int Med & subspecialties in 2013/14 (those earning at least $60,000) = $396,105\(^2\)

Average percent overhead reported by Internal Medicine specialists in 2010 = 22%\(^3\)

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1. National Physician Survey, 2013, CFPC, CMA, Royal College
2. National Physician Database, 2013/14, CIHI
Satisfaction among Medical Oncologists in Canada, 2013

Balance of personal & professional commitments

- Very dissatisfied: 5%
- Dissatisfied: 6%
- Neutral: 23%
- Satisfied: 27%
- Very satisfied: 31%
- NR: 9%

Current professional life

- Very dissatisfied: 5%
- Dissatisfied: 4%
- Neutral: 9%
- Satisfied: 9%
- Very satisfied: 59%
- NR: 14%

Source: 2013 National Physician Survey. CFPC, CMA, Royal College
Medical Oncologists who are Royal College, CFPC or CMQ certified in Canada, 2014

- Royal College: 100%
- CFPC: 12%
- CMQ: 8%
- Outside Canada:

Note: Subset of those who reported a certification. Physicians could indicate more than one certification body.

Source: 2014 National Physician Survey. CFPC, CMA, Royal College
Number of Medical Oncologists who retired during the THREE year period of 2012 to 2014

Source: CMA Masterfile – year over year comparisons

Note: “Retired” is based on giving up licence and is therefore excludes those who have retired from clinical practice but are still licensed; it includes physicians who have temporarily given up their licence but may return to practice at a later date.
### Total and Ministry funded postgraduate MD trainees in 2014/15 — Medical Oncology

<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>Memorial U N&amp;L</td>
<td>0</td>
<td>0</td>
<td>McMaster U</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Dalhousie U</td>
<td>3</td>
<td>3</td>
<td>UWO</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>U Laval</td>
<td>6</td>
<td>6</td>
<td>NOSM</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>U Sherbrooke</td>
<td>2</td>
<td>2</td>
<td>U Manitoba</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>U Montréal</td>
<td>7</td>
<td>7</td>
<td>U Sask</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>McGill U</td>
<td>8</td>
<td>14</td>
<td>U Alberta</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>U Ottawa</td>
<td>5</td>
<td>12</td>
<td>U Calgary</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>Queens U</td>
<td>3</td>
<td>5</td>
<td>UBC</td>
<td>9</td>
<td>18</td>
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<tr>
<td>U Toronto</td>
<td>13</td>
<td>47</td>
<td>Canada</td>
<td>79</td>
<td>150</td>
</tr>
</tbody>
</table>

Source: 2014/15 Annual Census of Post-MD Trainees, CAPER
PGY-4 and exiting postgraduate-MD trainees in 2014/15 – Medical Oncology

Source: 2014/15 Annual Census of Post-MD Trainees, CAPER

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

• Total of 28 PGY-4 Medical Oncology trainees representing 35% of all Medical Oncology trainees.

• Total of 79 Medical Oncology trainees representing 0.6% of all Ministry funded trainees.

• Total of 44 visa trainees in Medical Oncology.

• Total of 40 Medical Oncology trainees completed postgraduate training in 2014.

Source: 2014/15 Annual Census of Post-MD Trainees, CAPER
Location of 2013 Postgraduate-MD exits in 2015 – Medical Oncology

Of the 30 exits in 2013, 25 (83%) 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 of the organizations supplying information for this document

National Physician Survey
http://www.nationalphysiciansurvey.ca

Canadian Medical Association
http://www.cma.ca/pdc

Association of Faculties of Medicine of Canada
http://www.caper.ca/

Royal College of Physicians and Surgeons of Canada
http://www.royalcollege.ca/portal/page/portal/rc/credentials/start/routes/traditional_route

College of Family Physicians of Canada
http://www.cfpc.ca

Canadian Institute for Health Information
http://www.cihi.ca