GENERAL INFORMATION
(Source: Pathway Evaluation Program, Royal College of Physicians and Surgeons, The Hormone Foundation)

Endocrinology and Metabolism is the branch of medicine concerned with the study of the diseases of the endocrine organs, disorders of hormone systems and their target organs, and disorders of the pathways of glucose and lipid metabolism. It encompasses the assessment of patients with such disorders and the use of laboratory methods for diagnosis and monitoring of therapy. It also encompasses knowledge of endocrine physiology, particularly regarding normal control of hormone secretion and action.

Endocrinology and metabolism is a subspecialty of internal medicine. The practice involves the assessment, diagnosis and treatment of patients with diseases of the endocrine glands, disorders of hormone systems and their target organs, and disorders of metabolism.

Endocrinologists take care of many conditions including:
- diabetes
- thyroid diseases
- metabolic disorders
- over or under production of hormones
• menopause
• osteoporosis
• hypertension
• cholesterol (lipid) disorders
• infertility
• lack of growth (short stature)
• cancers of the endocrine glands

This specialty also encompasses the use of laboratory methods for the diagnosis and monitoring of therapy.

Endocrinology and metabolism is an intellectually challenging specialty and the patient population is diverse with respect to age, range of diseases and degree of illness. The research orientation of the practice attracts physicians with an interest in science rather than those who prefer more “hands-on” practice.
After completing medical school, to become a specialist in endocrinology and metabolism requires an additional 6 years. Candidates must first be certified or enrolled in an Royal College-approved training program in internal medicine or pediatrics. All candidates must be certified in their primary specialty in order to be eligible to write the Royal College certification examination in endocrinology and metabolism. Once certified in either of these, physicians must then go on to complete an additional 2 years of approved residency in adult or pediatric endocrinology and metabolism. Training must incorporate the principle of graded responsibility.

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

Canadian Society of Endocrinology & Metabolism
http://www.endo-metab.ca/
## Number of physicians and physicians/100,000 population in Endocrinology/Metabolism 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>8</td>
<td>1.5</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>13</td>
<td>1.4</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>5</td>
<td>0.7</td>
</tr>
<tr>
<td>Quebec</td>
<td>170</td>
<td>2.1</td>
</tr>
<tr>
<td>Ontario</td>
<td>193</td>
<td>1.4</td>
</tr>
<tr>
<td>Manitoba</td>
<td>14</td>
<td>1.1</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>6</td>
<td>0.5</td>
</tr>
<tr>
<td>Alberta</td>
<td>55</td>
<td>1.3</td>
</tr>
<tr>
<td>British Columbia</td>
<td>54</td>
<td>1.2</td>
</tr>
<tr>
<td>Territories</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>CANADA</td>
<td>518</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Source: 2015 CMA Masterfile
Physicians/100,000 population in Endocrinology/Metabolism in Canada, 1995 to 2015

Source: CMA Masterfile
Endocrinology/Metabolism specialists by gender and year in Canada, 1995 to 2015

Source: CMA Masterfile
Endocrinology/Metabolism specialists by age and gender in Canada, 2015

Gender

- Male: 43%
- Female: 57%

Age Group

- 34 and under: 8%
- 35 - 44: 33%
- 45 - 54: 26%
- 55 - 64: 22%
- 65 and over: 11%

Source: 2015 CMA Masterfile
Endocrinology/Metabolism specialists by age and gender in Canada, 2015

- **34 and Under**: 32 Female, 7 Male
- **45-54**: 76 Female, 53 Male
- **55-64**: 44 Female, 66 Male
- **65 and over**: 13 Female, 40 Male

Source: 2015 CMA Masterfile
Main work setting of Endocrinology/Metabolism specialists in Canada, 2014

- Academic Health Sciences Centre: 41%
- Private Office/Clinic: 32%
- Nursing home/long term care facility/seniors’ residence: 7%
- Community Hospital: 7%
- Non-AHSC Teaching Hospital: 5%
- University: 3%
- Free-standing Lab/Diag Clinic: 2%

Source: 2014 National Physician Survey. CFPC, CMA, Royal College
Practice organization for **Endocrinology/Metabolism** specialists in Canada, 2014

Source: 2014 National Physician Survey. CFPC, CMA, Royal College
## Hours worked per week (excluding on-call) by Endocrinology/Metabolism specialists 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>19.2</td>
</tr>
<tr>
<td>Direct patient care with teaching component</td>
<td>7.8</td>
</tr>
<tr>
<td>Teaching without patient care</td>
<td>2.6</td>
</tr>
<tr>
<td>Indirect patient care</td>
<td>7.3</td>
</tr>
<tr>
<td>Health facility committees</td>
<td>1.0</td>
</tr>
<tr>
<td>Administration</td>
<td>1.7</td>
</tr>
<tr>
<td>Research</td>
<td>6.9</td>
</tr>
<tr>
<td>Managing practice</td>
<td>1.4</td>
</tr>
<tr>
<td>Continued professional development</td>
<td>3.0</td>
</tr>
<tr>
<td>Other</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>TOTAL HOURS PER WEEK</strong></td>
<td><strong>51.2</strong></td>
</tr>
</tbody>
</table>

Source: 2014 National Physician Survey. CFPC, CMA, Royal College
On-call duty hours spent per month by Endocrinology/Metabolism specialists in Canada, 2014

Time spent on call in direct patient care = 29 hrs./month

Source: 2014 National Physician Survey. CFPC, CMA, Royal College
Remuneration for **Endocrinology/Metabolism** specialists in Canada

**Primary payment method**\(^1\) in 2013

- 90% + fee-for-service: 39%
- 90% + salary: 38%
- 90% + other*: 13%
- Blended: 5%
- NR: 5%

* 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
3 National Physician Survey, 2010, CFPC, CMA, Royal College
Satisfaction among Endocrinology/Metabolism specialists in Canada, 2013

Balance of personal & professional commitments

- NR: 11%
- Very dissatisfied: 1%
- Dissatisfied: 25%
- Neutral: 18%
- Satisfied: 40%
- Very satisfied: 4%

Current professional life

- NR: 11%
- Very dissatisfied: 1%
- Dissatisfied: 13%
- Neutral: 8%
- Satisfied: 42%
- Very satisfied: 25%

Source: 2013 National Physician Survey. CFPC, CMA, Royal College
Endocrinology/Metabolism specialists who are Royal College, CFPC or CMQ certified in Canada, 2014

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 Endocrinology/Metabolism specialists 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 – **Endocrinology**

<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>2</td>
<td>3</td>
</tr>
<tr>
<td>Dalhousie U</td>
<td>2</td>
<td>2</td>
<td>UWO</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>U Laval</td>
<td>0</td>
<td>0</td>
<td>NOSM</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>U Sherbrooke</td>
<td>6</td>
<td>6</td>
<td>U Manitoba</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>U Montréal</td>
<td>5</td>
<td>5</td>
<td>U Sask</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>McGill U</td>
<td>11</td>
<td>14</td>
<td>U Alberta</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>U Ottawa</td>
<td>8</td>
<td>13</td>
<td>U Calgary</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Queens U</td>
<td>0</td>
<td>0</td>
<td>UBC</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>U Toronto</td>
<td>14</td>
<td>34</td>
<td>Canada</td>
<td>76</td>
<td>115</td>
</tr>
</tbody>
</table>

* Includes Endocrinology (Int Med) and Endocrinology (Ped)

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

Source: 2014/15 Annual Census of Post-MD Trainees, CAPER
Postgraduate-MD trainees in 2014/15 – Endocrinology and Metabolism

• Total of 32 PGY-4 Endocrinology and Metabolism trainees representing 42% of all Endocrinology and Metabolism trainees.

• Total of 76 Endocrinology and Metabolism trainees representing 0.6% of all Ministry funded trainees.

• Total of 25 visa trainees in Endocrinology and Metabolism.

• Total of 27 Endocrinology and Metabolism trainees completed postgraduate training in 2014.

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

Of the 30 exits in 2013, 28 (93%) 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
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