NEUROLOGY PROFILE

Neurology is the branch of medicine concerned with the study of the nervous system in health and disease. Neurologists diagnose and treat nervous system disorders involving the brain and spinal cord and other nerve and muscular conditions. Many neurological problems are characterized by pain and are chronic, debilitating and untreatable. Neurologists are increasingly involved in rehabilitation and in the psychological and social aspects of patient care. A large portion of neurology practice is consultative.

Neurology requires that a physician be able to demonstrate diagnostic and therapeutic skills for ethical and effective patient care, access and apply relevant information to clinical practice. Neurologists are required to provide effective consultation services with respect to patient care, education and legal opinions.

A competent neurologist must be able to do the following:

- provide scientifically-based, comprehensive and effective diagnosis and management for patients with neurological disorders;
- communicate effectively with patients, their families and medical colleagues (particularly referring physicians), and other health care professionals;
- counsel patients and others on aspects of prevention of neurological disorders, including risk factors, and genetic and environmental concerns;
- maintain complete and accurate medical records;

- effectively coordinate the work of the health care team;
- be an effective teacher of other physicians (including medical students and house officers), other health care personnel and patients;
- be proficient in professional and technical skills related to the specialty;
- demonstrate personal and professional attitudes consistent with a consultant physician role;
- be willing and able to appraise accurately his or her own professional performance;
- be able to critically assess the neurological literature as it relates to patient diagnosis, investigation and management;
- be able to participate in clinical or basic science studies as a member of a research team.

Once undergraduate medical school is completed, a resident may choose to become certified as either an adult or pediatric neurologist. To become certified as an adult neurologist it requires 5 years of approved residency training. This period must include:

- 1 year of basic clinical training;
- a minimum of 1 year of Royal College-approved residency training in internal medicine (2 years are preferable);
- and a minimum of 3 years of Royal College-approved residency training in neurology.

To become certified as a pediatric neurologist requires 5 years of Royal College-approved residency training. This period must include:

- 1 year of basic clinical training;
- a minimum of 1 year of Royal College-approved residency training in pediatrics (2 years are preferable);
- and a minimum of 3 years of Royal College-approved residency training in neurology.

The Royal College of Physicians and Surgeons of Canada have created a reciprocity program that accepts the credentials of applicants to each other's examinations.

For further details on training requirements go to:

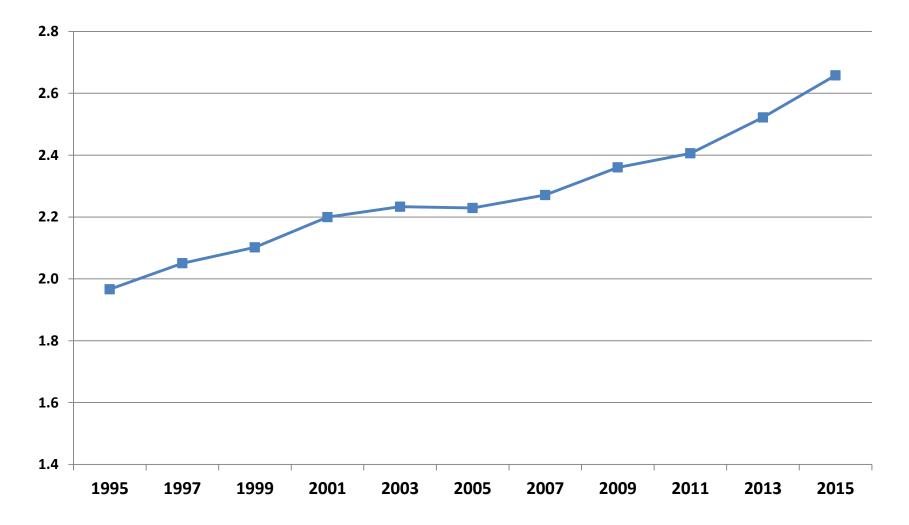
http://www.royalcollege.ca/portal/page/portal/rc/credentials/start/routes/traditional_route

Canadian Neurological Society <u>http://www.cnsfederation.org/societies/society/canadian-neurological-society/2/</u>

Number of physicians and physicians/100,000 population in <u>Neurology</u> in Canada, 2015

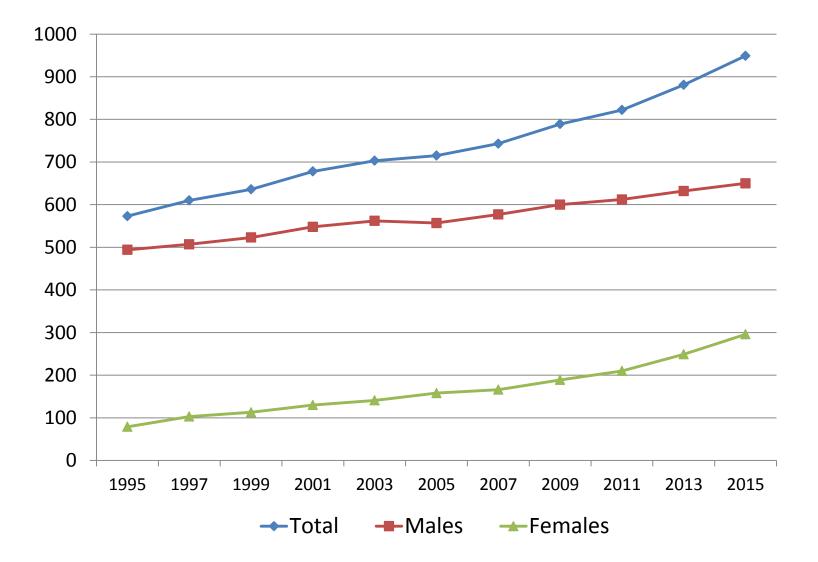
Province/Territory	Physicians	Phys/100k pop'n	
Newfoundland/Labrador	11	2.1	
Prince Edward Island	2	1.4	
Nova Scotia	26	2.8	
New Brunswick	7	0.9	
Quebec	275	3.3	
Ontario	325	2.4	
Manitoba	28	2.2	
Saskatchewan	19	1.7	
Alberta	121	2.9	
British Columbia	135	2.9	
Territories	0	0.0	
CANADA	949	2.7	

Physicians/100,000 population in <u>Neurology</u> in Canada, 1995 to 2015



Source: CMA Masterfile

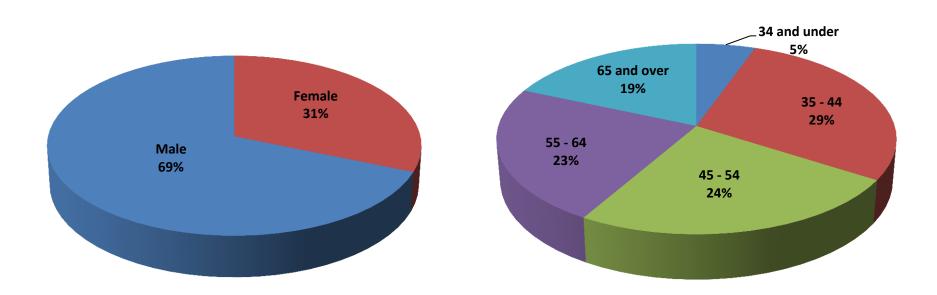
Neurologists by gender and year in Canada, 1995 to 2015



Neurologists by age and gender in Canada, 2015

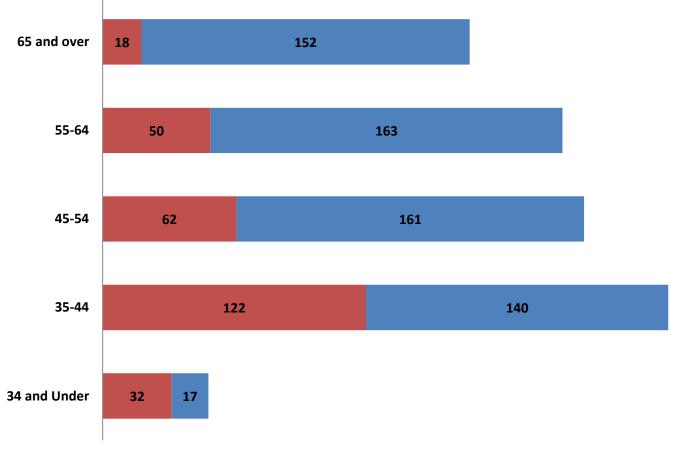
Gender

Age Group



Source: 2015 CMA Masterfile

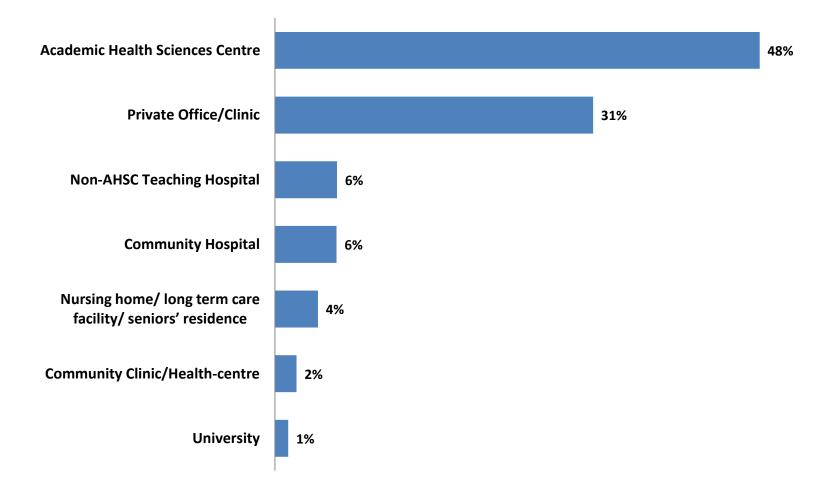
Neurologists by age and gender in Canada, 2015





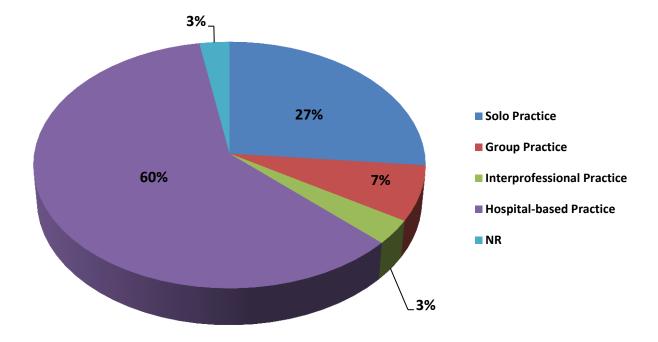
Source: 2015 CMA Masterfile

Main work setting of Neurologists in Canada, 2014



Source: 2014 National Physician Survey. CFPC, CMA, Royal College

Practice organization for <u>Neurologists</u> in Canada, 2014

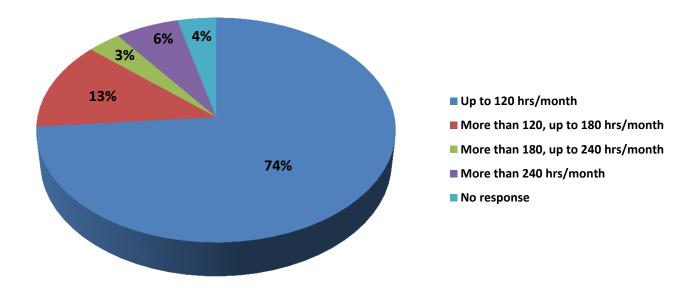


Hours worked per week (excluding on-call) by <u>Neurologists</u> in Canada, 2014

Activity	Hours worked per week		
Direct patient care without teaching component	23.4		
Direct patient care with teaching component	8.2		
Teaching without patient care	2.5		
Indirect patient care	7.7		
Health facility committees	1.2		
Administration	1.6		
Research	5.6		
Managing practice	1.8		
Continued professional development	4.0		
Other	1.7		
TOTAL HOURS PER WEEK	57.8		

Source: 2014 National Physician Survey. CFPC, CMA, Royal College

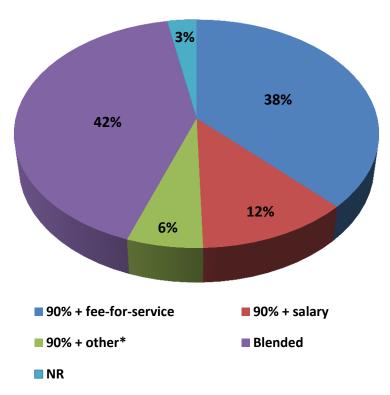
On-call duty hours spent per month by <u>Neurologists</u> in Canada, 2014



Time spent on call in direct patient care = 42 hrs./month

Source: 2014 National Physician Survey. CFPC, CMA, Royal College

Remuneration for <u>Neurologists</u> in Canada



Primary payment method¹ in 2013

Average gross clinical earnings for Neurologists in 2013/14 (those earning at least \$60,000) = \$306,809²

Average percent overhead reported by all medical specialists in 2010 = 20%³

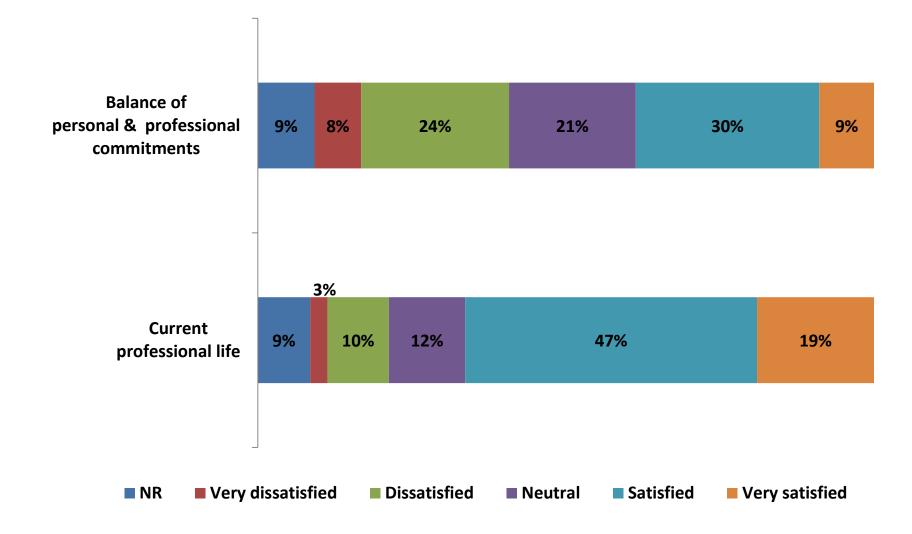
* Other includes capitation, sessional, contract and other methods

¹ National Physician Survey, 2013, CFPC, CMA, Royal College

² National Physician Database, 2013/14, CIHI

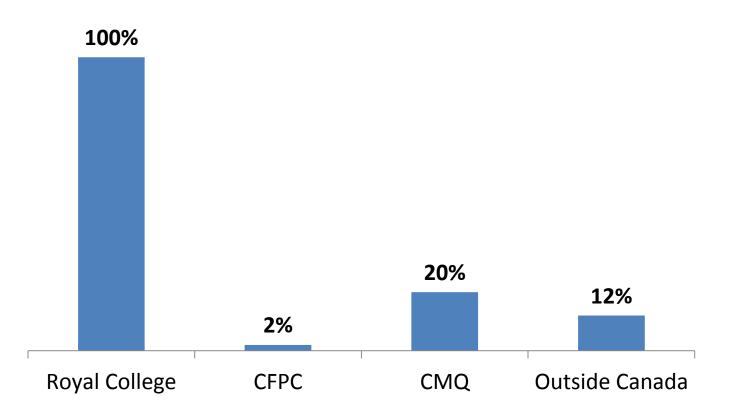
³ National Physician Survey, 2010, CFPC, CMA, Royal College

Satisfaction among <u>Neurologists</u> in Canada, 2013



Source: 2013 National Physician Survey. CFPC, CMA, Royal College

<u>Neurologists</u> who are Royal College, CFPC or CMQ certified in Canada, 2014

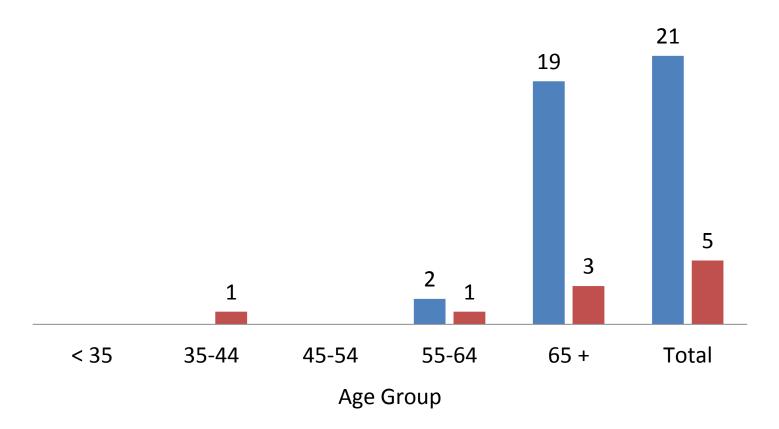


Note: Subset of those who reported a certification. Physicians could indicate more than one certification body.

Source: 2014 National Physician Survey. CFPC, CMA, Royal College

Number of <u>Neurologists</u> who retired during the THREE year period of 2012 to 2014

Males Females



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.

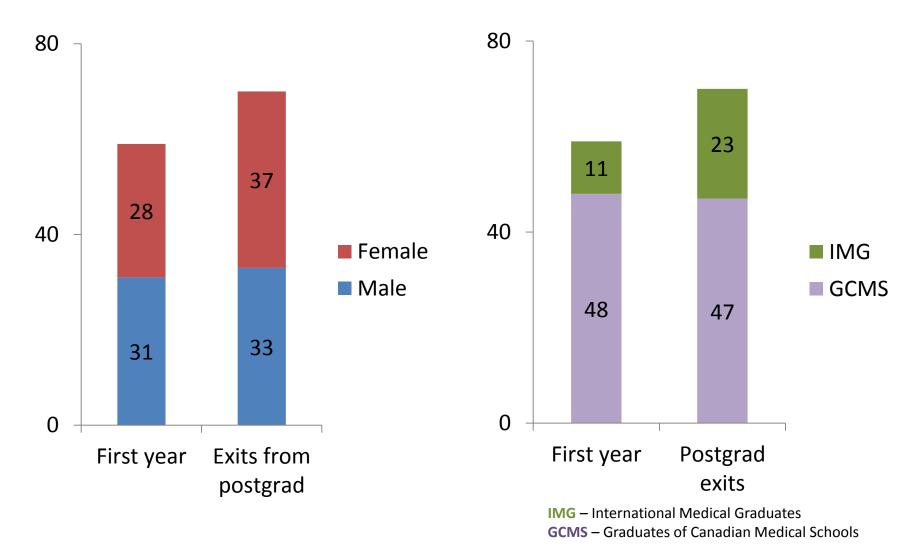
Total and Ministry funded postgraduate MD trainees in 2014/15 – <u>Neurology</u>*

Faculty of Medicine	Ministry funded	Total	Faculty of Medicine	Ministry funded	Total
Memorial U N&L	7	7	McMaster U	22	30
Dalhousie U	6	11	UWO	20	36
U Laval	12	12	NOSM	0	0
U Sherbrooke	11	11	U Manitoba	10	11
U Montréal	24	25	U Sask	8	8
McGill U	21	41	U Alberta	19	29
U Ottawa	23	29	U Calgary	20	42
Queens U	8	8	UBC	36	56
U Toronto	43	92	Canada	290	448

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

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

First year and exiting postgraduate MD trainees in 2014/15 – <u>Neurology</u>

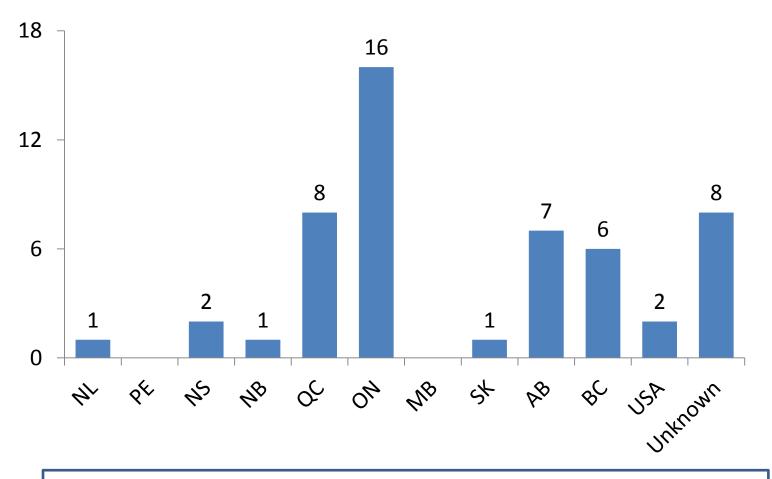


Source: 2014/15 Annual Census of Post-MD Trainees, CAPER

Postgraduate-MD trainees in 2014/15 – <u>Neurology</u>

- Total of 59 first year Neurology trainees representing 20% of all Neurology trainees.
- Total of 290 Neurology trainees representing 2% of all Ministry funded trainees.
- Total of 107 visa trainees in Neurology.
- Total of 70 Neurology trainees completed postgraduate training in 2014.

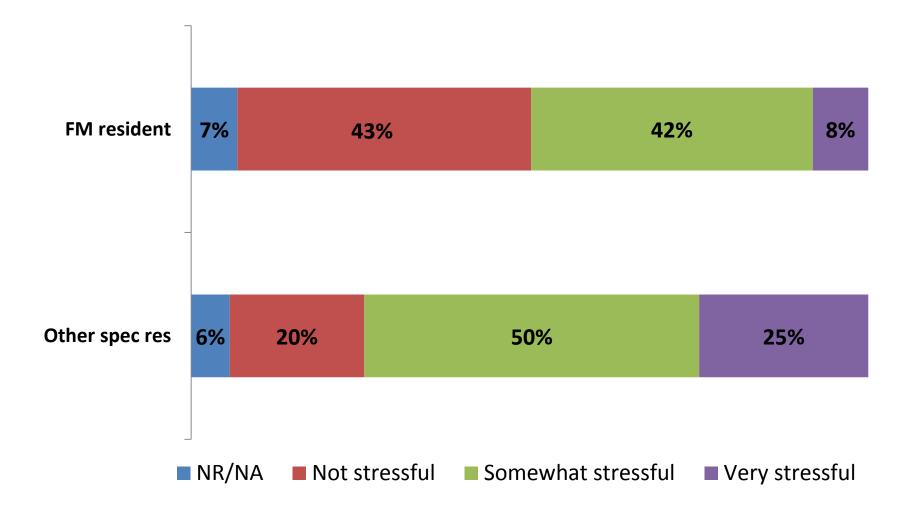
Location of 2013 Postgraduate-MD exits in 2015 – <u>Neurology</u>



Of the 52 exits in 2013, 42 (81%) 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 <u>http://www.royalcollege.ca/portal/page/portal/rc/credentials/start/routes/traditional_route</u>

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

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