## RESIDENCY AND PHYSICIAN WORKFORCE TRENDS

# saskdocs.ca

## **2018 Edition**



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## INTRODUCTION

saskdocs, is a one stop shop for physicians and their families wishing to live and work in Saskatchewan, Canada. As part of its core lines of business, the Agency is committed to working with stakeholders in the recruitment and retention of physicians in Saskatchewan.

It has been identified that the high need specialties in the province currently are anaesthesia, family medicine, general internal medicine, obstetrics and gynecology and psychiatry. Since 2007, an increased number of physicians are choosing to reside and practice in Saskatchewan with greater than 2,300 physicians licensed to practice in the province in 2018.

The University of Saskatchewan's College of Medicine offers over 100 residency training seats in various specialties each year. This publication is intended to provide information on residency and workforce trends in Saskatchewan and Canada, to aid medical students with making informed decisions on career planning. Students are also advised to consult with course advisors, colleagues, physicians, mentors, faculty, the Saskatchewan Medical Association (SMA), the health authority and saskdocs staff for additional guidance.

## DATA SOURCES

The data and information on medical specialties and subspecialties in this handbook are from provincial and national sources. Data in this report is subject to change. Please contact saskdocs for the most recent data.

SECTIONS	DESCRIPTION
Overview	The overview provides a summary for each specialty profile, which includes definition, required technical skills, and residency training requirements for each profile. The majority of information presented in the overview was sourced from Canadian Medical Association (CMA) Specialty Profiles. <b>Source:</b> Canadian Medical Association (CMA) Specialty Profiles.
Key Highlights	This section presents the following key information for each specialty:
	<i>Work hours:</i> Showcases the total weekly work hours for physicians in Canada in 2014 and/or 2017. <b>Source:</b> Canadian Medical Association (CMA) Specialty Profiles.
	Community Services: Lists the number of communities in Saskatchewan that may offer services in each specialty. Sources: Physician Registry, College of Physicians and Surgeons of Saskatchewan (CPSS). Saskatchewan Health Authority
	Post-graduate Seats: Presents the quota of seats available for post-graduate residency training. Source: College of Medicine, University of Saskatchewan, 2018
	Physician Payments: Provides the average annual payments for physicians in each specialty. <b>Sources:</b> Medical Services Branch (MSB) Annual Statistical Report, 2017-18. Medical Services Branch (MSB) Payment Grids, 2016. Saskatchewan Cancer Agency (SCA) Payment Grid, 2016.
Age Demographics	Physicians in Canada and Saskatchewan are captured according to age range. Due to the small sample size of some specialists in Saskatchewan (e.g. Medical Oncology), age demographics may not be shown. <b>Sources:</b> Medical Services Branch (MSB) Annual Statistical Report, 2017-18 Canadian Medical Association (CMA) Specialty Profiles.
Licensed Physician Workforce in Canada	This provides a graphical representation of physicians that are licensed to practice in each specialty in Canada. Data was sourced from the Royal College of Physicians and Surgeons of Canada (further sourced from The Canadian Institute for Health Information - CIHI). The Royal College is a regulatory college that helps to ensure and maintain standards of quality in the training and evaluation of medical and surgical specialists. The Medical Workforce Supply Overview provides a snapshot of trends in Canadian's

	physician workforce since 2010. <b>Source:</b> Medical Workforce Supply Overview, Canadian Institute for Health Information (CIHI).
Remuneration	This table displays a breakdown of annual average payments made to physicians in each specialty. Payments are based on fee-for-service and non-fee-for-service billings. Data capture may not be complete for physicians participating in non-fee-for-service arrangements and may be affected by the extent of shadow billing, which may impact the average payment stated (overstated/understated). Shadow billing is defined as physicians who are not billing fee-for-service and whose submissions to MSB do not generate an actual payment. <b>Source:</b> Medical Services Branch (MSB) Annual Statistical Report, 2017-18.
CMG Applications and Quota in the R-1 Match, Canada	This chart provides a graphical representation of total applications, quota and quota filled for Canadian Medical Graduates (CMGs) over a 5 year period from 2014 to 2018. Data was sourced from the R-1 Main Residency Match Reports that are published by CaRMS annually. CaRMS is the national organization that provides application and matching services for medical training throughout Canada. The R-1 Main Residency Match Reports presents information on match trends and results on an annual basis. <b>Source:</b> CaRMS R-1 Residency Match Reports.
CaRMS Results, Canada	This chart provides information on the number of application quota, total matches, and seats available in 2 <sup>nd</sup> Iteration, specific to Canada. Information covers a 5 year period from 2014 to 2018. <b>Source:</b> CaRMS R-1 Residency Match Reports.
CaRMS Results, Saskatchewan	This chart provides information on the number of application quota, and seats available in 2 <sup>nd</sup> Iteration, specific to Saskatchewan. Information covers a 5 year period from 2014 to 2018. Source: University of Saskatchewan, College of Medicine, 2018
Post Grad Exits vs Job Postings, Canada	A graphical representation of the national total number of postgraduate exits and job postings in 2017. This data was sourced from the Annual Census of Post-M.D. Trainees published by the Canadian Post-MD Education Registry (CAPER). CAPER is the central repository for statistical information on postgraduate medical education in Canada. CAPER gathers data from all 17 Canadian Faculties of Medicine on an annual basis. The CAPER Annual Census of Post-M.D. Trainees provide comprehensive statistical profiles of post-M.D. trainees such as their socio-demographics (e.g. gender, age), field of Post-M.D. training, source of funding, distribution of trainees across provinces, etc. Please note that job postings were compiled (by CAPER) during a 2 week period in August 2017, and only represent opportunities that are exclusive of locums, part-time, and postings before March 2017. <b>Source:</b> CAPER Annual Census of Post-M.D. Trainees.
Professional & Work-Life Balance Satisfaction	A graphical representation of current professional life and balance of personal and professional commitments. <b>Source:</b> Canadian Medical Association (CMA) Specialty Profiles.

## ACRONYMS

Below is a list of acronyms used in the handbook, accompanied by the source phrases:

CaRMS	Canadian Resident Matching Service
CAPER	Canadian Post-M.D. Education Registry Service
CCFP	Canadian College of Family Physicians
CPSS	College of Physicians and Surgeons of Saskatchewan
СМА	Canadian Medical Association
CIHI	Canadian Institute for Health Information
CMG(s)	Canadian Medical Graduate(s)
DMHO	Deputy Medical Health Officer
FRCP	Fellow of the Royal College of Physicians of Canada
GIM	General Internal Medicine
HA	Health Authority
IMG(s)	International Medical Graduate(s)
PG/Post Grad	Postgraduate
PGY	Postgraduate Year (ex. PGY1 = first year of medical residency)
MD	Doctor of Medicine
МНО	Medical Health Officer
MSB	Medical Services Branch
MSP	Medical Services Pan
SCA	Saskatchewan Cancer Agency
SK	Saskatchewan
SMA	Saskatchewan Medical Association
U of S	University of Saskatchewan

## SPECIALTY PROFILES: PGY1

Information compiled in this section of the guide includes the specialties available in the CaRMS R-1 Main Residency Match, which medical students can apply for in the final year of their MD.

The R-1 Main Residency Match (R-1 match) for entry level postgraduate positions is CaRMS' largest match. It encompasses all 17 Canadian medical schools and is offered in two iterations each year. The first iteration includes all graduating students and prior year graduates from Canada and the United States (US) who meet the basic eligibility criteria and have no prior postgraduate training in Canada or the US. It is also open to graduates from international medical schools (IMGs) who meet the basic criteria and have no prior postgraduate training in Canada or the US.

## ANAESTHESIOLOGY

#### **Overview:**

Anaesthesiology (anaesthesia) is a diversified specialty requiring physicians to draw upon their knowledge of pharmacy and physiology and to utilize their technical skills in the provision of perioperative care, critical care, emergency care and pain management.

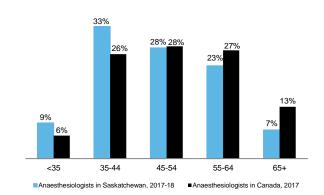
Certain strengths may be needed to pursue this specialty such as the ability to perform under pressure, to think quickly in stressful situations, to use your hands and to work in a team environment. The opportunity to establish continuing, long-term physician / patient relationships is limited in this specialty.

Certification in anaesthesiology requires completion of a 5 year Royal College-approved residency training program.

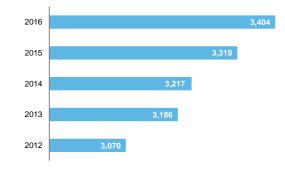
#### Key highlights:

- Anaesthesiologists in Canada worked a weekly average of 67.5 hours in 2017, 12.4 of which were on-call hours in direct patient care.
- The following communities may have anaesthesiology services in Saskatchewan:
  - Estevan
  - Lloydminster
  - Moose Jaw
  - North Battleford
  - Prince Albert
  - Regina
  - Saskatoon
  - Swift Current
  - Weyburn
  - Yorkton
- In 2018, the U of S quota for anaesthesiology postgraduate seats was 5. Training seats are available in Saskatoon.
- In 2017-18, 116 anaesthesiologists practiced in Saskatchewan.

Age Demographics

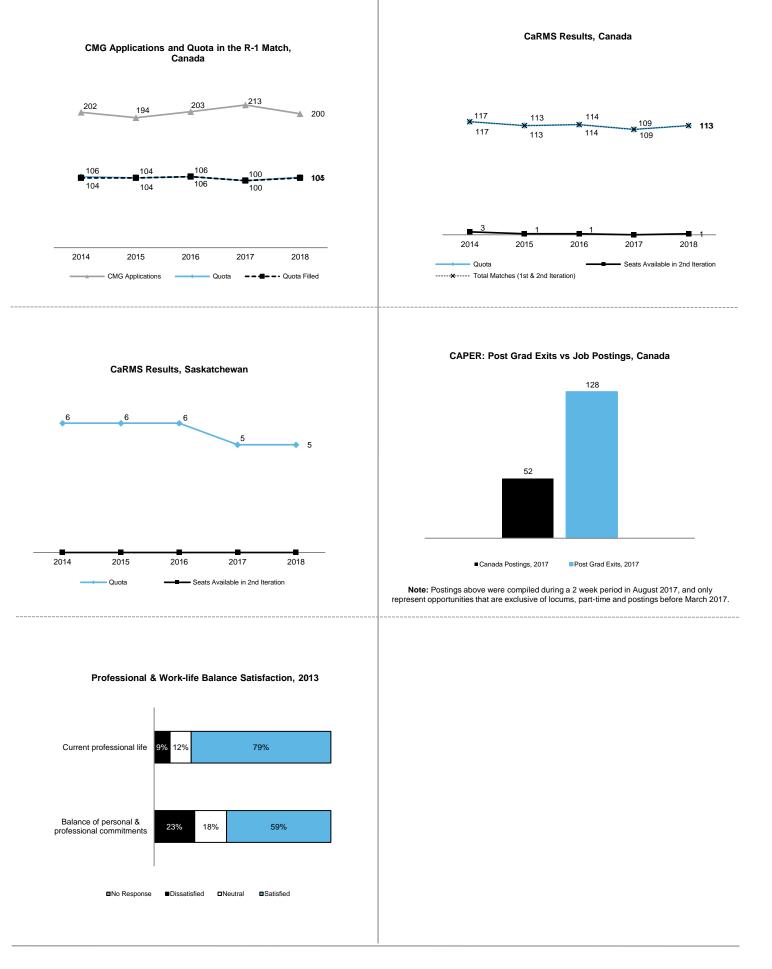


Licensed Anaesthesiologists in Canada



CIHI: Licensed Anesthesiologists in Canada

MSB Annual Statistical Report: Remuneration/Salary, 2016-17		
	Average Payment (\$000's)	Number of Physicians
Physicians*	\$371.3	112
Highest Paid	\$963.1	
Less than \$60,000	\$22.8	4
\$60, 000-74,999	\$0.0	0
\$75,000-99,999	\$86.9	4
\$100,000-124,999	\$114.9	1
\$125,000-149,999	\$137.3	4
\$150,000-174,999	\$172.4	3
\$175,000-199,999	\$192.7	3
\$200,000-249,999	\$233.1	11
\$250,000-299,999	\$277.7	9
\$300,000-349,999	\$320.8	16
Over \$350,000	\$480.0	61



## DERMATOLOGY

#### **Overview:**

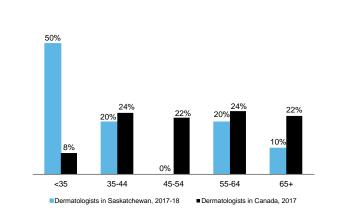
Dermatology is a diverse specialty that deals with benign and malignant disorders of the skin, mouth, external genitalia, hair and nails, as well as a number of sexually transmitted diseases.

Dermatologists engage in a variety of procedural work and have the opportunity to combine cognitive skills with surgical skills. They also have expertise in the care of normal skin and in the prevention of skin disease and skin cancers.

Certification in dermatology requires completion of a 5 year Royal College-approved residency training program.

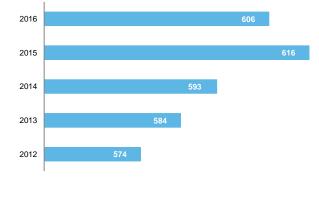
#### Key highlights:

- Dermatologists in Canada worked a weekly average of 57.7 hours in 2017, 3.3 of which were on-call hours in direct patient care.
- The following communities may have dermatology services in Saskatchewan:
  - Regina
  - Saskatoon
- The U of S currently does not offer a dermatology training program, however the Ministry of Health may purchase a networked training seat from another province, for which the resident has a return of service to Saskatchewan upon completion of training.
- In 2017-18, 10 dermatologists practiced in Saskatchewan.



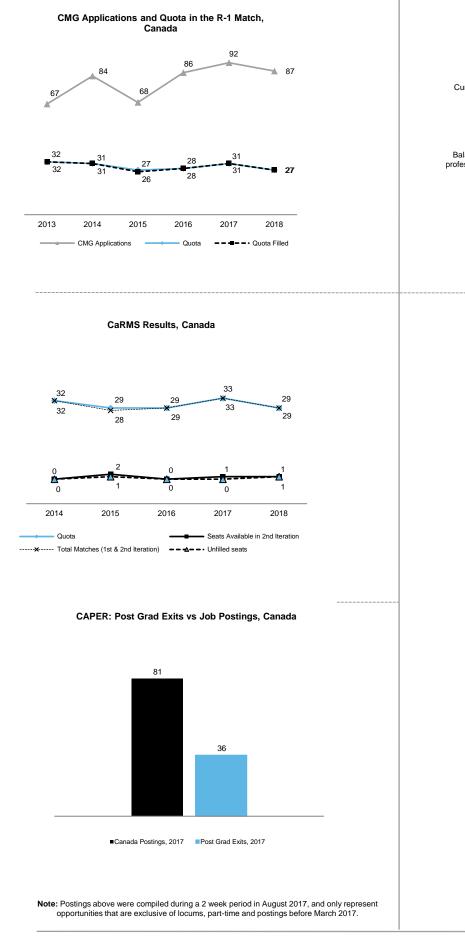
Age Demographics

Licensed Dermatologists in Canada

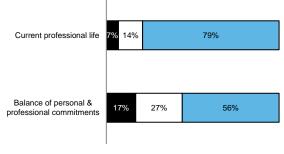


CIHI: Licensed Dermatologists in Canada

	Average Payment (\$000's)	Number of Physicians
Physicians*	\$301.0	10
Highest Paid	\$676.9	
Less than \$60,000	-	-
\$60, 000-74,999	-	-
\$75,000-99,999	\$0.0	C
\$100,000-124,999	118	1
\$125,000-149,999	-	-
\$150,000-174,999	166	2
\$175,000-199,999	200	1
\$200,000-249,999	\$229.0	2
\$250,000-299,999	\$0.0	C
\$300,000-349,999	\$0.0	C
Over \$350,000	\$475.5	4



Professional & Work-life Balance Satisfaction, 2013



Dissatisfied Neutral

Satisfied

No Response

Residency and Physician Workforce Trends, 2018

## **DIAGNOSTIC RADIOLOGY**

#### **Overview:**

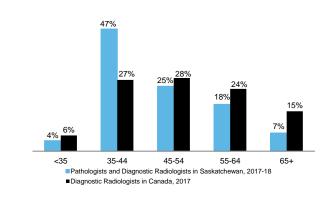
Diagnostic radiology is concerned with the use of imaging techniques in the study, diagnosis and treatment of disease. The radiologist's major role is as a consultant to other physicians.

Trained and certified Radiologists are able to perform minimal invasive procedures such as biopsies, drain abscesses, clot bleeding arteries, remove biliary or urinary tract stones and insert central lines.

Certification in diagnostic radiology requires completion of a 5 year Royal College-approved residency training program.

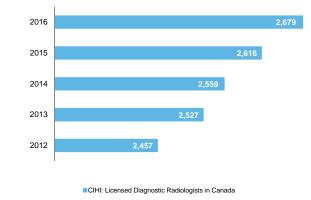
#### **Key highlights:**

- Radiologists in Canada worked a weekly average of 60.1 hours in 2017, 8.6 of which were on-call hours in direct patient care.
- The following communities may have diagnostic radiology services in Saskatchewan:
  - Lloydminster
  - Melfort
  - Moose Jaw
  - North Battleford
  - Prince Albert
  - Regina
  - Saskatoon
  - Swift Current
  - Yorkton
- In 2018, the U of S quota for diagnostic radiology postgraduate seats was 4. Training seats are available in Saskatoon.
- In 2017-18, 133 diagnostic radiologists and pathologists practiced in Saskatchewan. Average remuneration stated in the graph includes diagnostic radiologists and pathologists practicing in the province. Pathologists in Saskatchewan are in a non fee-forservice payment model (shadow billing) with a salary grid range of \$346,477 - \$393,893.

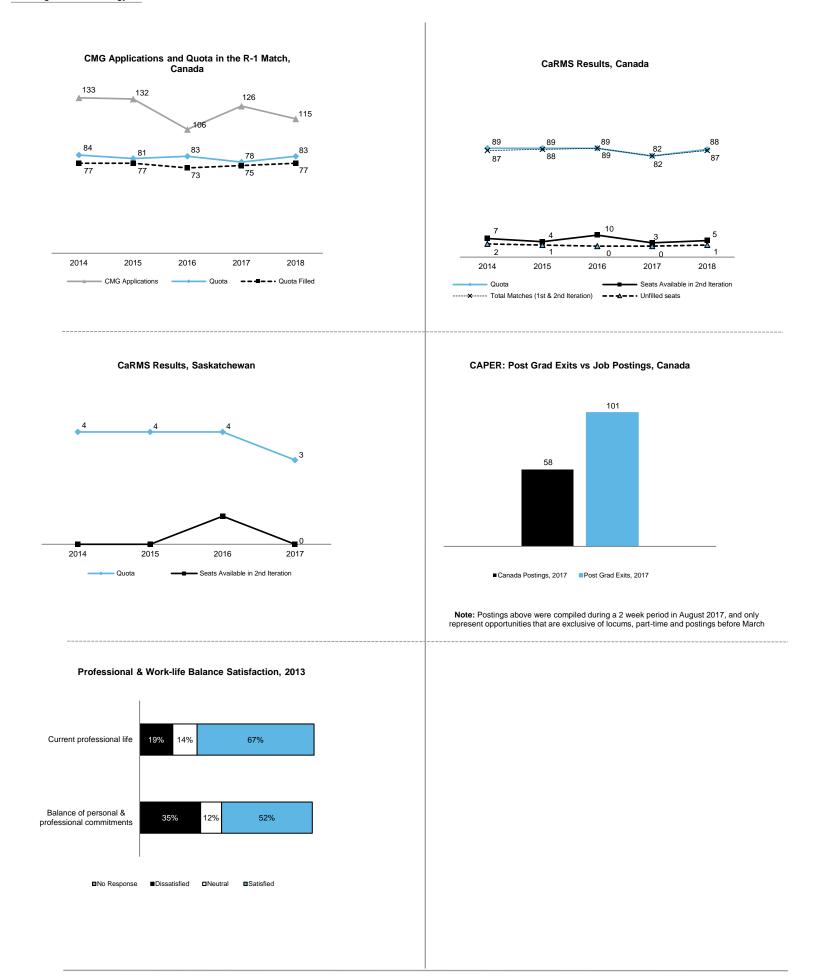


Age Demographics

Licensed Diagnostic Radiologists in Canada



MSB Annual Statistical Report: Remuneration/Salary, 2017-18**		
	Average Payment (\$000's)	Number of Physicians
Physicians*	\$437.6	101
Highest Paid	\$2,030.8	
Less than \$60,000	\$20.4	32
\$60, 000-74,999	\$68.0	7
\$75,000-99,999	\$84.8	9
\$100,000-124,999	\$111.9	7
\$125,000-149,999	\$135.6	6
\$150,000-174,999	\$165.3	7
\$175,000-199,999	\$178.1	1
\$200,000-249,999	\$211.3	5
\$250,000-299,999	\$283.9	2
\$300,000-349,999	\$330.6	7
Over \$350,000	\$721.8	50



## **EMERGENCY MEDICINE**

#### **Overview:**

Emergency medicine focuses on the recognition, evaluation and care of patients who are acutely ill or injured. It is a high-pressure, fast-paced specialty that, because of its diversity, requires a broad base of medical knowledge and a variety of well-honed clinical and technical skills.

Emergency physicians need a number of personal strengths, including physical and emotional toughness, confidence, composure, ability to multi task and strong interpersonal skills. They must also be willing and able to do shift work.

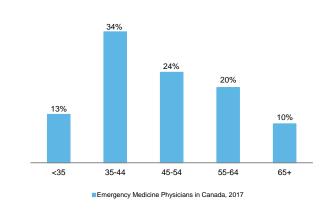
After completing medical school, physicians can choose either of two pathways to become a certified emergency medicine physician.

- Certification with the College of Family Physicians of Canada (CCFP) in emergency medicine, after completing a 2 year CCFP-approved family medicine residency, physicians pursue a 1 year certificate program in emergency medicine (suitable for individuals wishing to work in a rural and/or northern emergency department).
- Certification with the Royal College of Physicians and Surgeons of Canada (FRCP) through a 5 year Royal College-approved residency training program.

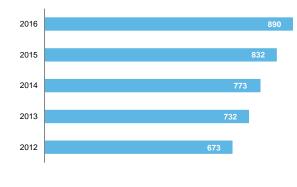
#### **Key highlights:**

- Emergency Medicine Physicians in Canada worked a weekly average of 53.1 hours in 2017, 5.4 of which were on-call hours in direct patient care.
- In 2018, the U of S quota for the emergency medicine Royal College training program was 3. Training seats are available in Saskatoon. The U of S quota for the emergency medicine CCFP training program was 9 with training seats in Regina and Saskatoon.
- In 2016-17, the emergency medicine payment grid range was \$371,977 - \$420,174 per annum.

Age Demographics

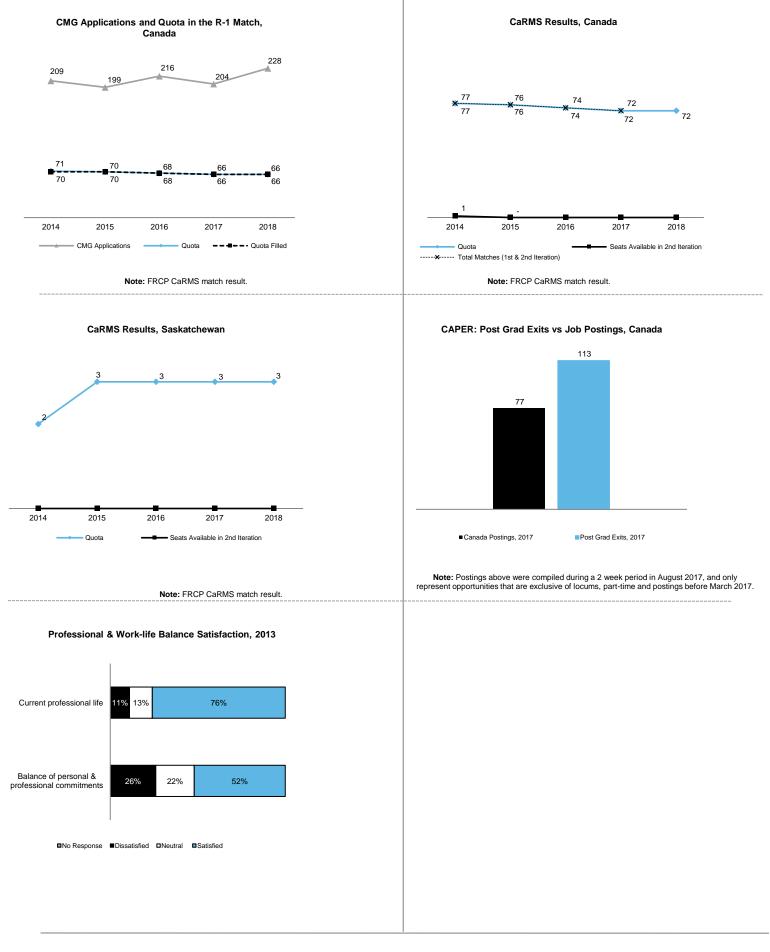


Licensed Emergency Medicine Physicians in Canada





Level	Pay/Hour	Annual Pay/Physician
1	\$258.32	\$371,977
2	\$266.31	\$383,481
3	\$274.54	\$395,341
4	\$283.03	\$407,569
5	\$291.79	\$420,174



## **FAMILY MEDICINE**

#### **Overview:**

Family medicine is the main primary care medical specialty in Canada. It focuses care on the individual within the context of the family and the community.

While family medicine may seem the most "general" of the specialties, it is in fact, a precise discipline, integrating a unique blend of biomedical, behavioural and social sciences, while employing a diverse range of cognitive and procedural skills.

In addition to acute disorders, which are sometimes lifethreatening, there is a high frequency of chronic diseases, emotional problems and transient illnesses.

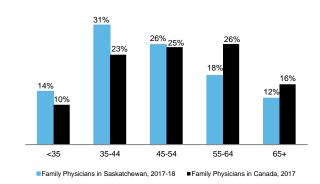
Family physicians also play an important role in health promotion and illness prevention, acute care, coordinating care with other specialties and health professionals, and advocating on behalf of their patients with respect to the care and services they need in all parts of the health care system.

Upon completion of medical school, to become certified in family medicine with the College of Family Physicians of Canada (CFPC) requires an additional 2 years of postgraduate training.

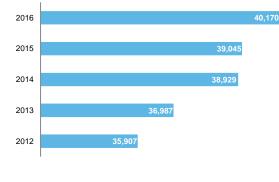
#### **Key highlights:**

- In 2017-18 there were over 1,000 family physicians practicing in Saskatchewan. Approximately 52% practiced in Saskatoon or Regina, 25% practiced in rural communities and 23% practiced in smaller cities.
- Family physicians in Canada worked a weekly average of 55.9 hours in 2017, 7.2 of which were on-call hours in direct patient care.
- In 2018, the U of S quota for Family Medicine residency seats was 45.
- Family physicians may sub-specialize by completing an additional year of training, known as R3 programs. The U of S offers R3 training programs in Anesthesia, Emergency Medicine, Enhanced Surgical Skills and Sport & Exercise Medicine.
- Family medicine postgraduate training programs are available in the following communities:
  - La Ronge
  - Moose Jaw
  - North Battleford
  - Prince Albert
  - Regina
  - Saskatoon
  - Swift Current

Age Demographics

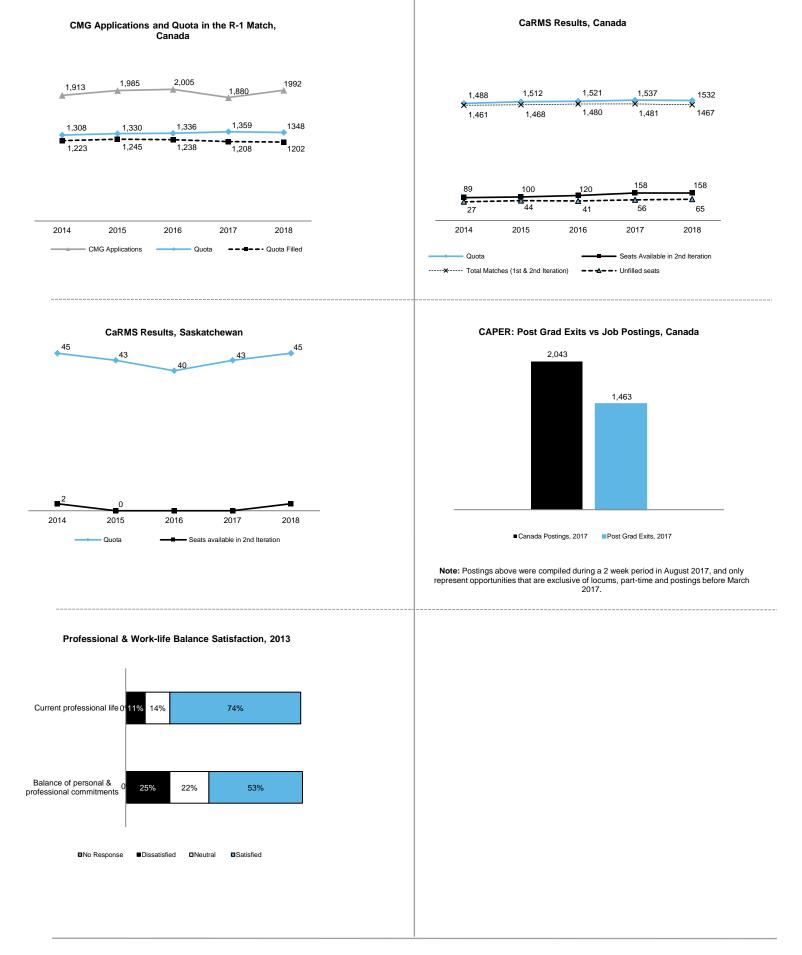


Licensed Family Medicine Physicians in Canada





	Average Payment (\$000's)	Number of Physicians
Physicians*	\$249.8	960
Highest Paid	\$1,082.1	
Less than \$60,000	\$26.4	172
\$60, 000-74,999	\$68.0	47
\$75,000-99,999	\$86.8	78
\$100,000-124,999	\$112.8	78
\$125,000-149,999	\$136.7	71
\$150,000-174,999	\$161.8	78
\$175,000-199,999	\$187.1	72
\$200,000-249,999	\$224.1	152
\$250,000-299,999	\$275.3	103
\$300,000-349,999	\$323.6	84
Over \$350,000	\$485.7	197



## **GENERAL PATHOLOGY**

#### **Overview:**

General pathology is a specialty concerned with all aspects of laboratory investigation in health and disease that focuses on the causes, manifestations and diagnosis of disease. A pathologist may act as a consultant for clinical physicians and their advice is often sought in the treatment of patients. Pathologists apply a range of biomedical science knowledge to achieve a diagnosis.

General/clinical pathology is the specialty encompassing autopsy, surgical pathology, anatomical pathology, cytology and medical biochemistry, hematological pathology, medical microbiology and transfusion medicine.

General pathologists are competent in the selection and interpretation of diagnostic tests, in the principles of methodology instrumentation and quality control, and managerial skills appropriate to the direction of a clinical laboratory in a community hospital.

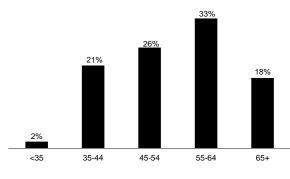
They are involved in the day-to-day liaison between the laboratory and the clinical staff and serve as consultants to clinical colleagues in the application of the resources of the laboratory to help solve clinical problems.

Certification in general pathology requires completion of a 5 year Royal College-approved residency training program.

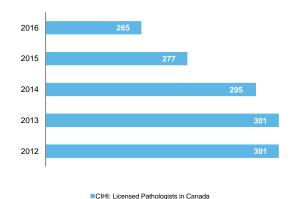
#### **Key highlights:**

- Pathologists in Canada worked a weekly average of 47.2 hours in 2017.
- The following communities may have general pathology services in Saskatchewan:
  - Moose Jaw
  - North Battleford
  - Prince Albert
  - Regina
  - Saskatoon
- In 2018, the U of S quota for pathology postgraduate seats was 2. Training seats are available in Saskatoon.
- In 2016-17, the pathology payment range was \$346,477 - \$393,893 which includes the physicians salary, professional expenses and benefits.

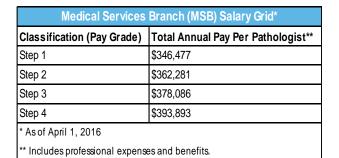








Licensed Pathologists in Canada





## **GENERAL SURGERY**

#### **Overview:**

The general surgeon is trained to provide surgical care for the whole patient. This includes making a diagnosis; preoperative, operative and postoperative management of the patient; and the surgical treatment of the alimentary tract; abdomen and its contents, including the pelvis; breast, skin and soft tissue; and endocrine system.

It includes head and neck surgery, pediatric surgery, surgical critical care, surgical oncology, trauma and burns, transplants and vascular surgery.

The exact profile of a general surgeon's practice may vary depending on whether the practice is in an academic centre, an urban community or a more rural centre.

In rural practice, some surgeons may do gynecologic, urologic, orthopedic and Otolaryngology (ENT) surgeries. In some academic centres, a general surgeon might limit his/her practice to one subspecialty.

General surgery tends to be a varied specialty, where the activities of a general surgeon involve time in the operating room, office, emergency department and the intensive care unit. General surgical practice requires expertise in communication and collaboration, teaching and research, health care management and continuing professional debt.

Certification in general surgery requires completion of a 5 year Royal College-approved residency training program. Some universities offer a 6-year program, while others offer an optional PGY6 year.

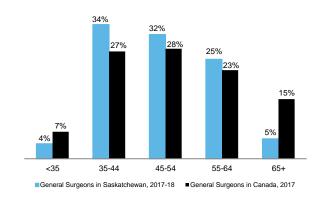
#### **Key highlights:**

- General surgeons in Canada worked a weekly average of 72.7 hours in 2017, 15.2 of which were on-call hours in direct patient care.
- The following communities may have general surgery services in Saskatchewan:
  - Estevan
  - Lloydminster
  - Melfort
- ReginaSaskatoon
- Moose Jaw
- North Battleford
- Swift Current

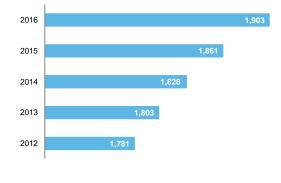
Prince Albert

- Yorkton
- In 2018, the U of S quota for general surgery postgraduate seats was 4. Training seats are available in Saskatoon.
- In 2017-18, 85 general surgeons practiced in Saskatchewan.





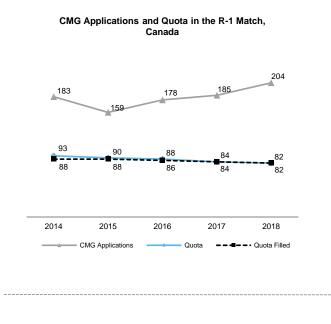
Licensed General Surgeons in Canada

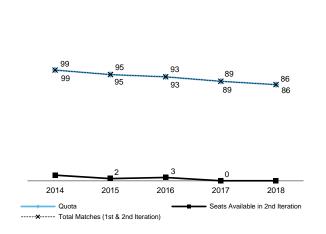




MSB Annual Statistical Report: Remuneration/Salary, 2017-18		
	Average Payment (\$000's)	Number of Physicians
Physicians*	\$386.3	79
Highest Paid	\$958.0	
Less than \$60,000	\$19.0	6
\$60, 000-74,999	\$61.0	3
\$75,000-99,999	\$84.8	Ę
\$100,000-124,999	\$115.8	3
\$125,000-149,999	\$133.5	1
\$150,000-174,999	\$151.4	1
\$175,000-199,999	\$189.6	
\$200,000-249,999	\$228.7	Ę
\$250,000-299,999	\$287.8	8
\$300,000-349,999	\$331.3	(
Over \$350,000	\$535.0	4

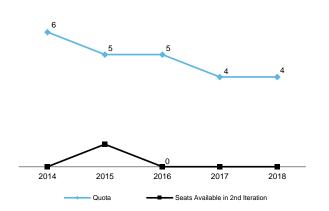
\* Physicians receiving \$60K or more in MSP payments.



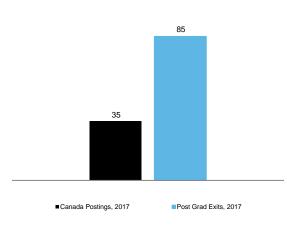


CaRMS Results, Canada

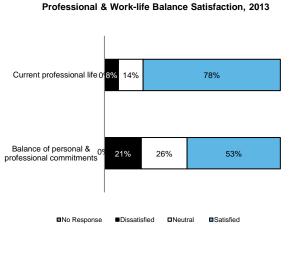
CaRMS Results, Saskatchewan



CAPER: Post Grad Exits vs Job Postings, Canada



Note: Postings above were compiled during a 2 week period in August 2017, and only represent opportunities that are exclusive of locums, part-time and postings before March



## **INTERNAL MEDICINE**

#### **Overview:**

Internal medicine is a broad based specialty that has its roots in primary care and is dedicated to providing primary and specialty care to adults. Internists diagnose and manage diseases involving any of the organ systems and are specially trained to manage seriously ill patients suffering from advanced illness and/or diseases of more than one system.

Internists tend to the general medical needs of their patients in the office, including disease prevention, early detection of disease, screening, patient education and follow-up care from hospitalization.

In the hospital and ambulatory setting, internists manage acute and chronic illness of their patients and other patients that have been referred to them by other practitioners such as family physicians. They are also trained to meet the special needs of the geriatric population.

Internists may take additional training and subspecialize in the following areas of internal medicine:

- Cardiology
- Medical oncology
   Nephrology
   Occupational medicine

Pain medicine

Rheumatology

Palliative medicine

Respiratory medicine

Pharmacology & toxicology

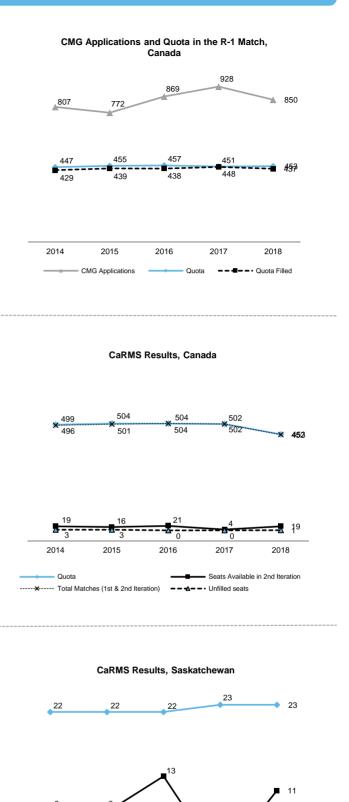
- Clinical allergy & immunology •
- Critical care medicine
- Endocrinology & metabolism
- Gastroenterology
- General Internal Medicine
- GeriatricsHaematology
- Infectious diseases & medical microbiology
- Medical biochemistry

After completing medical school, to become an internist requires 4 years of internal medicine postgraduate training. Those who choose to subspecialize are required to complete 2-3 years of training in the subspecialty residency training program, which commences after completing 3 core years of the internist program. Residents apply for subspecialty training in their 3rd or 4th year of internal medicine residency through the CaRMS Medicine Subspecialty Match (MSM).

Please reference the Medicine Subspecialties section for additional information.

#### Key highlights:

- The information captured in the graphs reflects the R1-Main Residency Match data for internal medicine.
- In 2017, the U of S quota for internal medicine postgraduate seats was 23. Training seats are available in Saskatoon and Regina.



2014

2015

Quota

2016

2017

Seats Available in 2nd Iteration

20

2018

Internal Medicine

## **NEUROLOGY**

#### **Overview:**

Neurology is the area of medicine that focusses on treating disorders of the nerves and nervous system. This includes diagnosing and treating the spinal cord, brain, nerves and other muscular conditions.

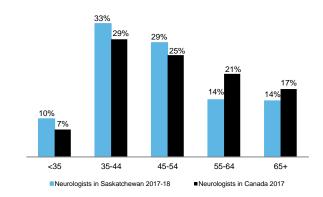
Neurologists are also involved in patient rehabilitation, as many neurological problems are chronic, characterized by pain and sometimes untreatable. Neurologists are trained to be diagnostic and therapeutic in clinical practice.

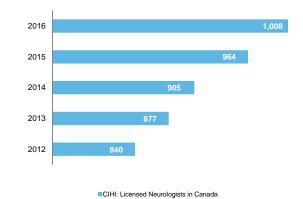
Certification in neurology requires completion of a 5 year Royal College-approved residency training program.

#### Key highlights:

- Neurologists in Canada worked a weekly average of 67.9 hours in 2017,11.7 of which were on-call hours in direct patient care.
- The following communities may have neurology services in Saskatchewan:
  - Regina
  - Saskatoon
- In 2018, the U of S quota for neurology was 2 postgraduate training seats. Training seats are available in Saskatoon.
- o In 2017-18, 22 neurologists practiced in Saskatchewan.



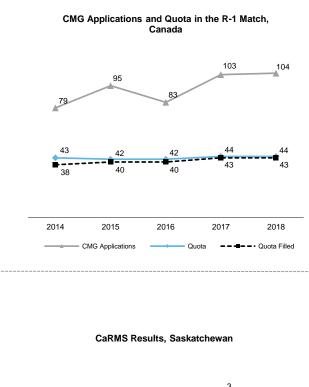


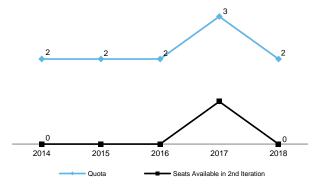


icensed	Neuro	logists	in	Canada

L

MSB Annual Statistical Report: Remuneration/Salary, 2017-18			
	Average Payment (\$000's)	Number of Physicians	
Physicians*	\$350.0	21	
Highest Paid	\$1,059.1		
Less than \$60,000	\$24.4	1	
\$60, 000-74,999	-	-	
\$75,000-99,999	97	1	
\$100,000-124,999	\$0.0	0	
\$125,000-149,999	138	2	
\$150,000-174,999	\$158.5	2	
\$175,000-199,999	\$191.1	3	
\$200,000-249,999	\$211.8	1	
\$250,000-299,999	\$299.6	1	
\$300,000-349,999	\$326.6	1	
Over \$350,000	\$524.8	10	
* Physicians receiving \$60K or more in MSP payments.			

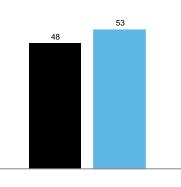




51 50 48 50 ×48 48 **×** 51 × 50 49 48 0 0 2014 2015 2016 2017 2018 Quota Seats Available in 2nd Iteration --X----- Total Matches (1st & 2nd Iteration) ------- Unfilled seats

CaRMS Results, Canada

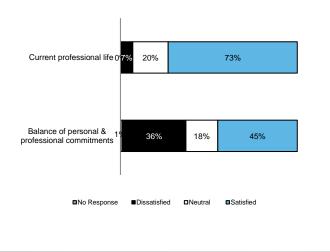
CAPER: Post Grad Exits vs Job Postings, Canada



Canada Postings, 2017 Post Grad Exits, 2017

Note: Postings above were compiled during a 2 week period in August 2017, and only represent opportunities that are exclusive of locums, part-time and postings before March 2017.

Professional & Work-life Balance Satisfaction, 2013



## **NEUROSURGERY**

#### **Overview:**

Neurosurgery focuses on the central, peripheral and autonomic nervous systems. Practitioners diagnose problems through physical examination with the aid of such tools as MRI, CT scans and laboratory tests and frequently provide surgical treatment.

Neurosurgery includes management of diseases of the skull, the brain, the pituitary and the spinal cord. Management of head and spinal injuries is a major challenge. As many head injuries and acute intracranial emergencies occur in off-hours, this is not a specialty for those who value lifestyle. It is, however, a very challenging and rewarding career.

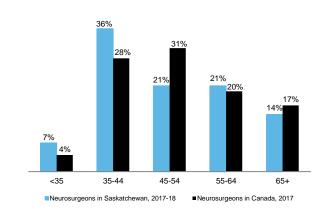
This specialty involves the ability to diagnose, and the technical expertise for the effective surgical treatment of congenital and acquired abnormalities. It also requires expertise in trauma and diseases affecting the nervous system that can be potentially prevented, alleviated or cured.

Certification in neurosurgery requires completion of a 6 year Royal College-approved residency training program.

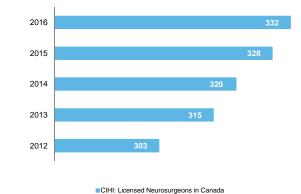
#### **Key highlights:**

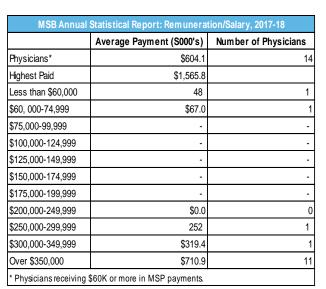
- Neurosurgeons in Canada worked a weekly average of 64.6 hours in 2014, 13 of which were on-call hours in direct patient care.
- The following communities may have neurosurgery services in Saskatchewan:
  - Regina
  - Saskatoon
- In 2018, the U of S quota for neurosurgery postgraduate seats was 1. This training seat is available in Saskatoon.
- In 2017-18, 15 neurosurgeons practiced in Saskatchewan.

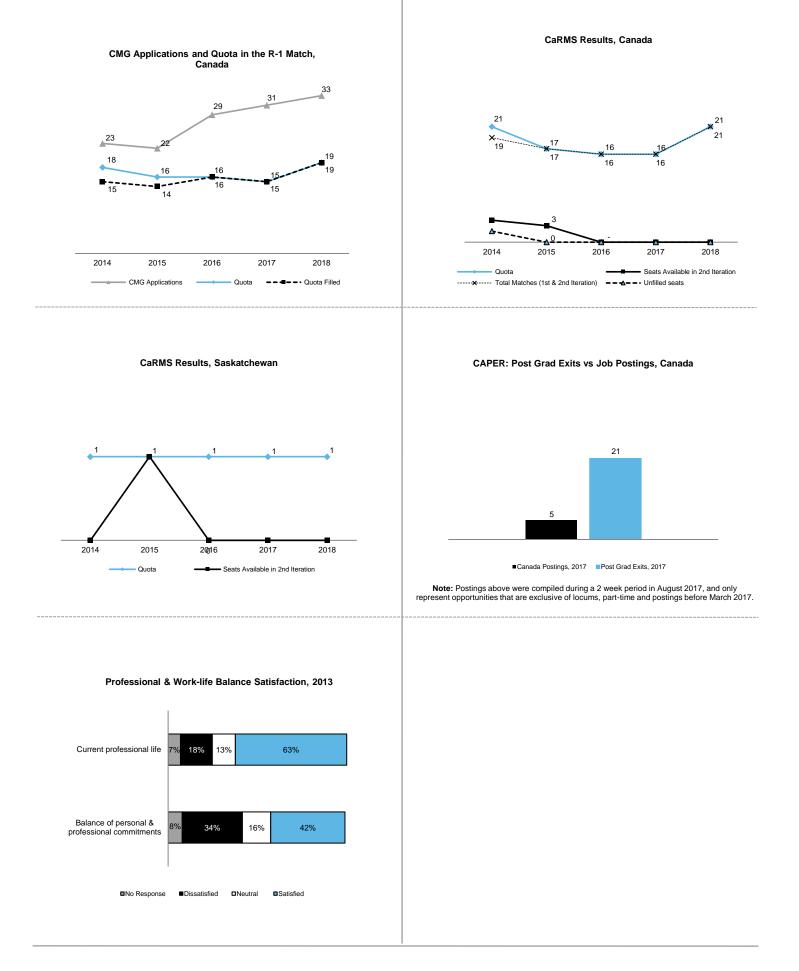
Age Demographics



Licensed Neurosurgeons in Canada







## NUCLEAR MEDICINE

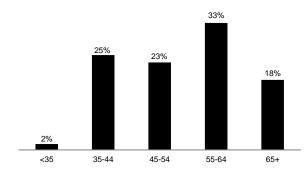
#### **Overview:**

Nuclear medicine is concerned primarily (although not exclusively) with the use of unsealed radioactive sources in the study, diagnosis and treatment of disease. Nuclear medicine combines medicine and basic biomedical science and has grown out of the fields of radiology, internal medicine and pathology. It is primarily a clinical, diagnostic discipline using radioactivity attached to pharmaceuticals.

Certification in nuclear medicine requires completion of a 5 year Royal College-approved residency training program.

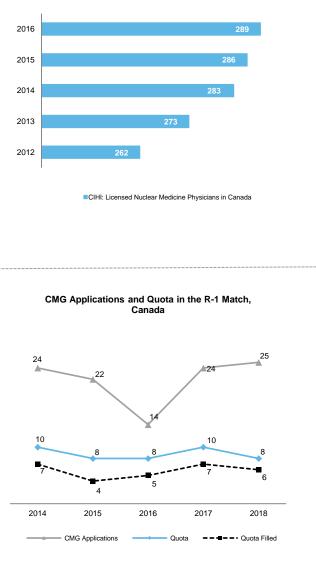
#### Key highlights:

- Nuclear medicine physicians in Canada worked a weekly average of 48.6 hours in 2014.
- The following communities may have nuclear medicine services in Saskatchewan:
  - Regina
  - Saskatoon
- The U of S currently does not offer a nuclear medicine training program.

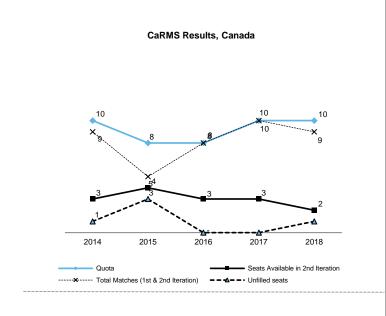


Age Demographics

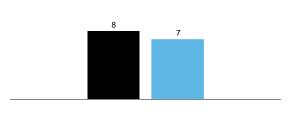




#### Licensed Nuclear Medicine Physicians in Canada



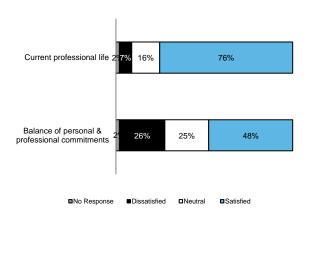
CAPER: Post Grad Exits vs Job Postings, Canada



Canada Postings, 2017

Post Grad Exits, 2017

Note: Postings above were compiled during a 2 week period in August 2017, and only represent opportunities that are exclusive of locums, part-time and postings before March 2017.



Professional & Work-life Balance Satisfaction, 2013

## **OBSTETRICS AND GYNECOLOGY**

Obstetrics and gynecology combines medical, surgical, obstetrical and gynecologic knowledge in the prevention, diagnosis and management of conditions affecting women's general and reproductive health.

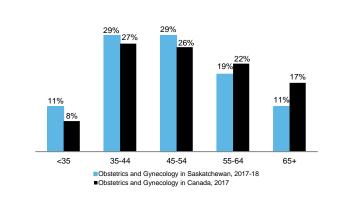
Obstetrics/gynecology offers the ability to subspecialize in the areas of gynecological oncology, reproductive endocrinology and infertility or maternal-fetal medicine. Other areas of sub-specialization include contraception, adolescent gynecology and endoscopy.

Physicians in this discipline can provide services such as preventive medicine, detection of sexually transmitted diseases, prenatal care, pap test screening, family planning, menopause, endometriosis, osteoporosis and surgery.

Certification in obstetrics and gynecology requires completion of a 5 year Royal College-approved residency training program.

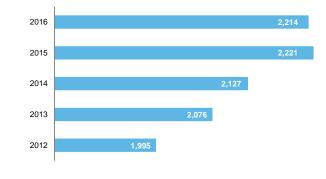
#### **Key highlights:**

- Obstetricians and gynecologists in Canada worked a weekly average of 65.7 hours in 2017, 14.5 of which were on-call hours in direct patient care.
- The following communities may have obstetrics and gynecology services in Saskatchewan:
  - Estevan
  - Lloydminster
  - Moose Jaw
  - North Battleford
  - Prince Albert
  - Regina
  - Saskatoon
  - Swift Current
  - Yorkton
- In 2018, the U of S quotas for obstetrics and gynecology post-graduate seats was 6. Training seats are available in Regina and Saskatoon.
- In 2017-18, 68 obstetricians and gynecologists practiced in Saskatchewan.



Age Demographics

Licensed Obstetricians and Gynecologists in Canada



CIHI: Licensed Obstetricians and Gynecologists in Canada

MSB Annual Statistical Report: Remuneration/Salary, 2017-18		
	Average Payment (\$000's)	Number of Physicians
Physicians*	\$402.9	65
Highest Paid	\$1,107.9	
Less than \$60,000	\$31.5	3
\$60, 000-74,999	\$66.9	2
\$75,000-99,999	\$84.7	1
\$100,000-124,999	\$121.2	2
\$125,000-149,999	128	1
\$150,000-174,999	174	1
\$175,000-199,999	\$189.9	8
\$200,000-249,999	\$223.4	6
\$250,000-299,999	\$278.9	5
\$300,000-349,999	\$341.8	4
Over \$350,000	\$565.9	35

Note: Payments above are based on fee-for-service billings.



## **OPHTHALMOLOGY**

#### **Overview:**

Ophthalmology deals with the screening, diagnosis and management of optical, medical and surgical disorders and diseases of the eye, associated orbital structures and neuro-visual pathways. The specialty relies on a combination of diagnostic, medical and surgical skills.

Ophthalmologists operate within a fairly specific area of expertise but on a broad range of patients, from newborns to geriatric patients. A large portion of the care and treatment they provide is done in their private office. They are the leaders of the eye care team interacting with other physicians and health care professionals in the management of eye care, including orthoptists, ophthalmic technicians, nurses and optometrists.

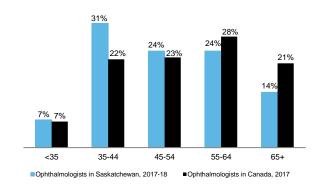
There are a number of subspecialties within ophthalmology, including cornea and external disease, glaucoma, neuro-ophthalmology, ophthalmic pathology, ophthalmic plastic surgery, pediatric ophthalmology, retina, uveitis and low vision.

Certification in ophthalmology requires completion of a 5 year Royal College-approved residency training program.

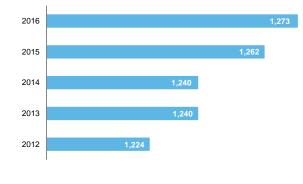
#### **Key highlights:**

- Ophthalmologists in Canada worked a weekly average of 57.9 hours in 2017, 6.8 of which were on-call hours in direct patient care.
- The following communities may have ophthalmology services in Saskatchewan:
  - Lloydminster
  - Moose Jaw
  - North Battleford
  - Prince Albert
  - Regina
  - Saskatoon
  - Swift Current
  - Yorkton
- In 2018, the U of S quota for ophthalmology postgraduate seats was 1. This training seat is available in Saskatoon.
- In 2017-18, 29 ophthalmologists practiced in Saskatchewan.

#### Age Demographics

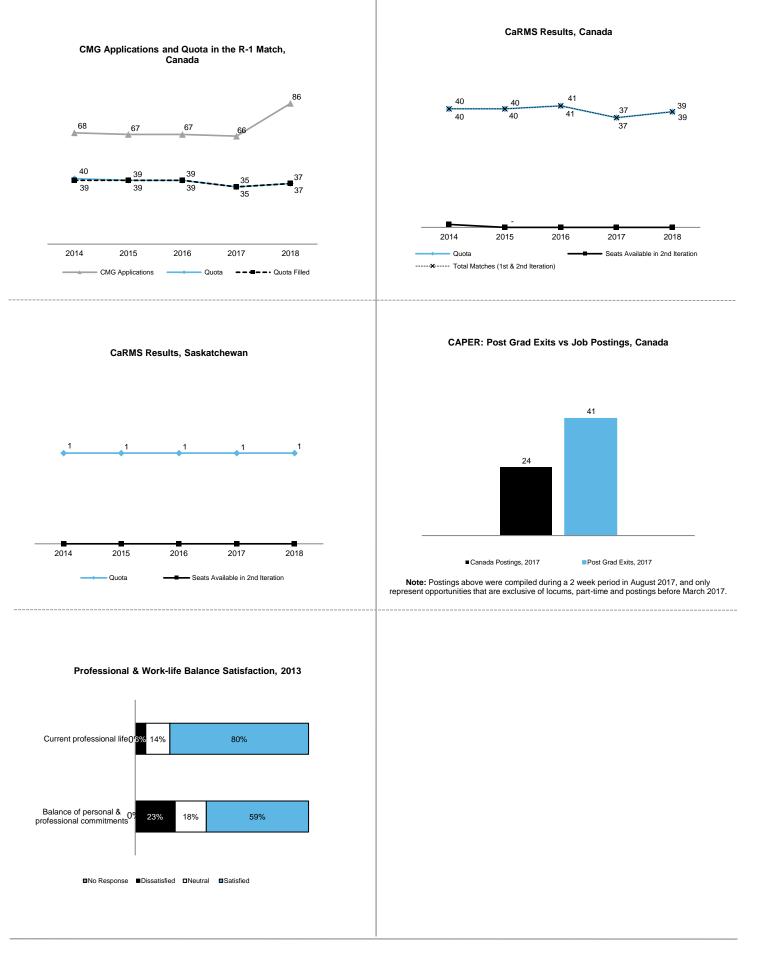


Licensed Ophthalmologists in Canada



CIHI: Licensed Ophthalmologists in Canada

	Average Payment (\$000's)	Number of Physicians
Physicians*	\$1,246.0	29
Highest Paid	\$3,995.7	
Less than \$60,000	\$0.0	C
\$60, 000-74,999	-	-
\$75,000-99,999	-	-
\$100,000-124,999	-	-
\$125,000-149,999	-	-
\$150,000-174,999	-	-
\$175,000-199,999	-	-
\$200,000-249,999	-	-
\$250,000-299,999	-	-
\$300,000-349,999	-	-
Over \$350,000	\$1,246.0	29



## **ORTHOPEDIC SURGERY**

#### **Overview:**

Orthopedic surgery focuses on the diagnosis, treatment, rehabilitation and prevention of diseases of the bones, joints, ligament, muscles, tendons and nerves. These specialists employ medical, physical, rehabilitation and surgery to restore normal function.

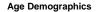
Orthopedic surgeons treat diseases and conditions, such as fractures, dislocations, torn ligaments, sprains and strains, tendon injuries, pulled muscles, bursitis, ruptured disks, sciatica, lower back pain, scoliosis, abnormalities of fingers and toes and growth abnormalities, surgical management of degenerative joint disease, knocked knees, bow legs, bunions and hammer toes, arthritis, osteoporosis, bone tumors, muscular dystrophy, cerebral palsy, club feet and unequal leg length.

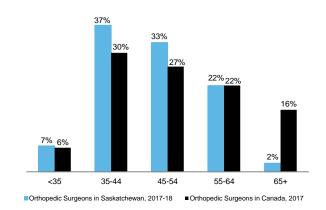
Orthopedic surgeons may engage in a broad practice or may focus on a narrower area of special interest such as spine, hip, foot or sports medicine.

Certification in orthopedic surgery requires completion of a 5 year Royal College-approved residency training program.

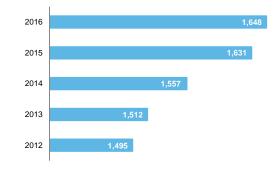
#### **Key highlights:**

- Orthopedic surgeons in Canada worked a weekly average of 64.2 hours in 2017, 12.6 of which were oncall hours in direct patient care.
- The following communities may have orthopedic surgery services in Saskatchewan:
  - Lloydminster
  - Moose Jaw
  - North Battleford
  - Prince Albert
  - Regina
  - Saskatoon
  - Yorkton
- In 2018, the U of S quota for orthopedic postgraduate seats was 2. Training seats are available in Saskatoon.
- In 2017-18, 51 orthopedic surgeons practiced in Saskatchewan.





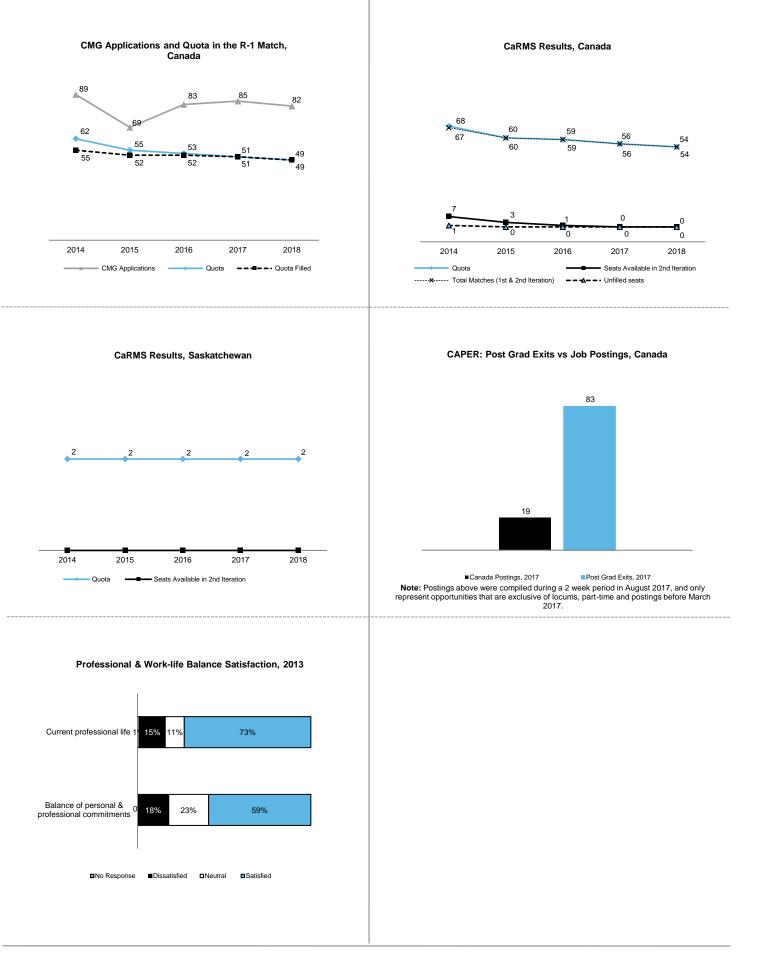
Licensed Orthopedic Surgeons in Canada



CIHI: Licensed Orthopedic Surgeons in Canada

MSB Annual Statistical Report: Remuneration/Salary, 2017-18			
	Average Payment (\$000's)	Number of Physicians	
Physicians*	\$559.3	46	
Highest Paid	\$1,742.2		
Less than \$60,000	\$32.1	5	
\$60, 000-74,999	\$0.0	0	
\$75,000-99,999	90	2	
\$100,000-124,999	119	2	
\$125,000-149,999	-		
\$150,000-174,999	174	1	
\$175,000-199,999	\$0.0	0	
\$200,000-249,999	\$239.0	2	
\$250,000-299,999	\$289.8	6	
\$300,000-349,999	\$319.2	2	
Over \$350,000	\$718.8	31	
* Dhugigiona reactiving COV as more in MCD noumante			

\* Physicians receiving \$60K or more in MSP payments.



# **OTOLARYNGOLOGY**

### **Overview:**

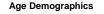
Otolaryngology is a medical specialty focused on the screening, diagnosis and management of medical surgical disorders of the ear, the upper respiratory and upper alimentary system, and related structures of the head and neck. Which includes the ear, nose, and throat and most of the head and neck. With the exception of eye-related disorders (ophthalmology) and lesions of the brain (neurology and neurosurgery), otolaryngologists treat virtually all diseases and lesions above the shoulders. These specialists receive training in octology, rhinology, laryngology, allergy, head & neck surgery, facial surgery, plastic & reconstructive surgery, and bronchesophagology.

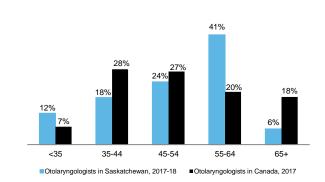
Otolaryngology embraces some components of neurology, neurosurgery, plastic surgery, dermatology, respirology, pathology and oral surgery. It requires clinical competence and detailed knowledge of the scientific rationale for the medical and surgical management of otolaryngologic disorders in patients of all ages. This includes knowledge of the techniques of craniofacial surgery, neurotologic surgery, facial cosmetic surgery and reconstructive surgery of the head and neck.

Certification in otolaryngology requires completion of a 5 year Royal College-approved residency training program.

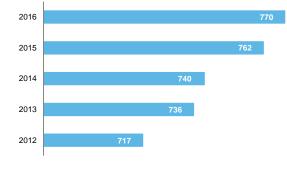
### **Key highlights:**

- Otolaryngologists in Canada worked a weekly average of 56.7 hours in 20147 6.1 of which were on-call hours in direct patient care.
- The following communities may have otolaryngology services in Saskatchewan:
  - Lloydminster
  - North Battleford
  - Prince Albert
  - Regina
  - Saskatoon
- The U of S currently does not offer a otolaryngology training program however the Ministry of Health may purchase a networked training seat from another province, for which the resident has a return of service to Saskatchewan upon completion of training.
- In 2017-18, 17 otolaryngologists practiced in Saskatchewan.



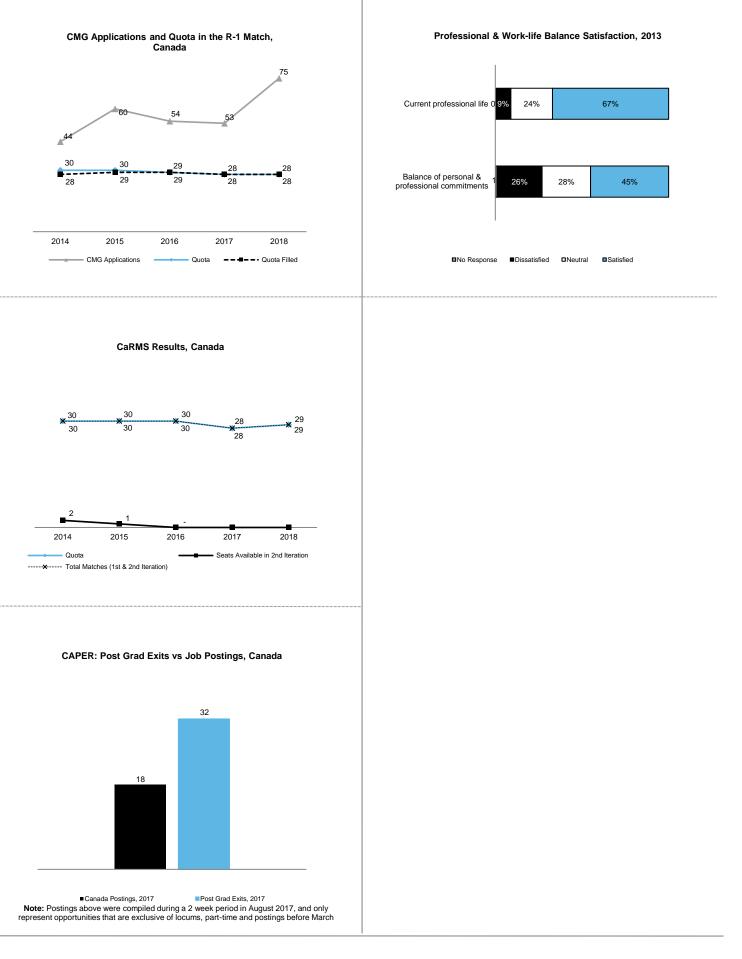


Licensed Otolaryngologists in Canada



CIHI: Licensed Otolaryngologists in Canada

	Average Devenant (\$000la)	Number of Dhysisons
	Average Payment (\$000's)	Number of Physicans
Physicians*	\$579.5	17
Highest Paid	\$1,389.8	
Less than \$60,000	-	
\$60, 000-74,999	\$0.0	C
\$75,000-99,999	\$81.8	2
\$100,000-124,999	-	
\$125,000-149,999	-	
\$150,000-174,999	\$154.1	1
\$175,000-199,999	-	
\$200,000-249,999	\$217.1	2
\$250,000-299,999	-	
\$300,000-349,999	\$332.6	1
Over \$350,000	\$797.0	11



# PAEDIATRICS

### **Overview:**

Paediatricians are specialists who focus on the physical, emotional and social health of neonates, infants, children, adolescents and young adults. This specialty deals with health promotion and prevention, and the detection and management of physical, behavioural, developmental, mental/emotional, environmental and social problems that affect children.

Paediatricians work closely with a large network of physicians and other health care professionals. Paediatrics provides a fair degree of flexibility in the type of practice. Some are affiliated with community hospitals and have consulting general paediatric practices where patients are referred by other physicians such as family physicians, emergency physicians or obstetricians.

Certification in paediatrics requires completion of a 4 year Royal College-approved residency training program.

Paediatricians may take additional training and subspecialize in the following areas of paediatrics:

Cardiology

- Hematology-Oncology
- Clinical Immunology & Allergy

Endocrinology & Metabolism

- Infectious Disease
- Clinical Pharmacology & Toxicology Critical Care Medicine
- Neonatal-Perinatal Medicine
   Nephrology
- Developmental

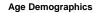
Gastroenterology

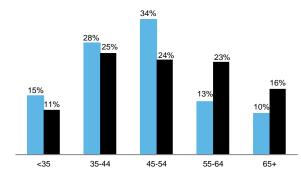
**Emergency Medicine** 

- Neurology
  - RespirologyRheumatology

### Key highlights:

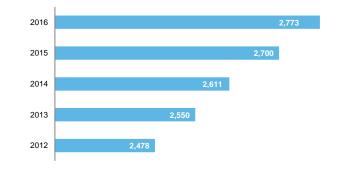
- Paediatricians in Canada worked a weekly average of 58.5 hours in 2017, 9.3 of which were on-call hours in direct patient care.
- The following communities may have paediatric services in Saskatchewan:
  - Lloydminster
  - Moose Jaw
  - Prince Albert
  - Regina
  - Saskatoon
  - Swift Current
  - Yorkton
- In 2018, the U of S quota for paediatrics postgraduate seats was 8. Training seats are available in Saskatoon.
- In 2017-18, 85 pediatricians and medical geneticists practiced in Saskatchewan.





Paediatricians and Medical Geneticists in Saskatchewan, 2017-18 Paediatrics in Canada, 2017

Licensed Pediatricians in Canada



CIHI: Licensed Paediatricians in Canada

MSB Annual Statistical Report: Remuneration/Salary, 2017-18				
	Average Payment (\$000's)	Number of Physicians		
Physicians*	\$190.5	68		
Highest Paid	\$858.6			
Less than \$60,000	\$23.8	17		
\$60, 000-74,999	\$68.6	5		
\$75,000-99,999	\$88.5	7		
\$100,000-124,999	\$112.2	13		
\$125,000-149,999	\$137.4	8		
\$150,000-174,999	\$165.5	11		
\$175,000-199,999	\$187.6	5		
\$200,000-249,999	\$223.2	6		
\$250,000-299,999	\$267.9	3		
\$300,000-349,999	\$314.5	5		
Over \$350,000	\$592.3	5		
* Physicians receiving	\$60K or more in MSP payments			



# PHYSICAL MEDICINE AND REHABILITATION

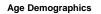
### **Overview**:

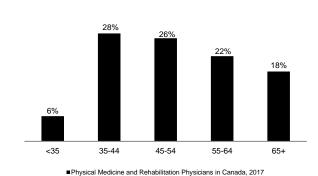
Physical medicine and rehabilitation is the area of medicine that is concerned with optimizing and restoring functional ability to individuals or groups with physical impairments or disabilities.

Physicians in this discipline approach treatment options by considering the physical and psychosocial aspects of a patient's diagnosis and basing evaluations on both neurological and musculoskeletal factors.

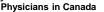
Certification in physical medicine and rehabilitation requires completion of a 5 year Royal College-approved residency training program.

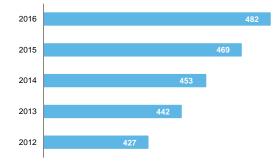
- Physical medicine and rehabilitation physicians in Canada worked a weekly average of 53.7 hours in 2017.
- The following communities may have physical medicine and rehabilitation services in Saskatchewan:
  - Regina
  - Saskatoon
- In 2018, the U of S quota for physical medicine and rehabilitation postgraduate seats was 2. Training seats are available in Saskatoon.



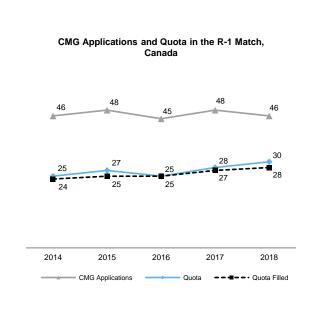


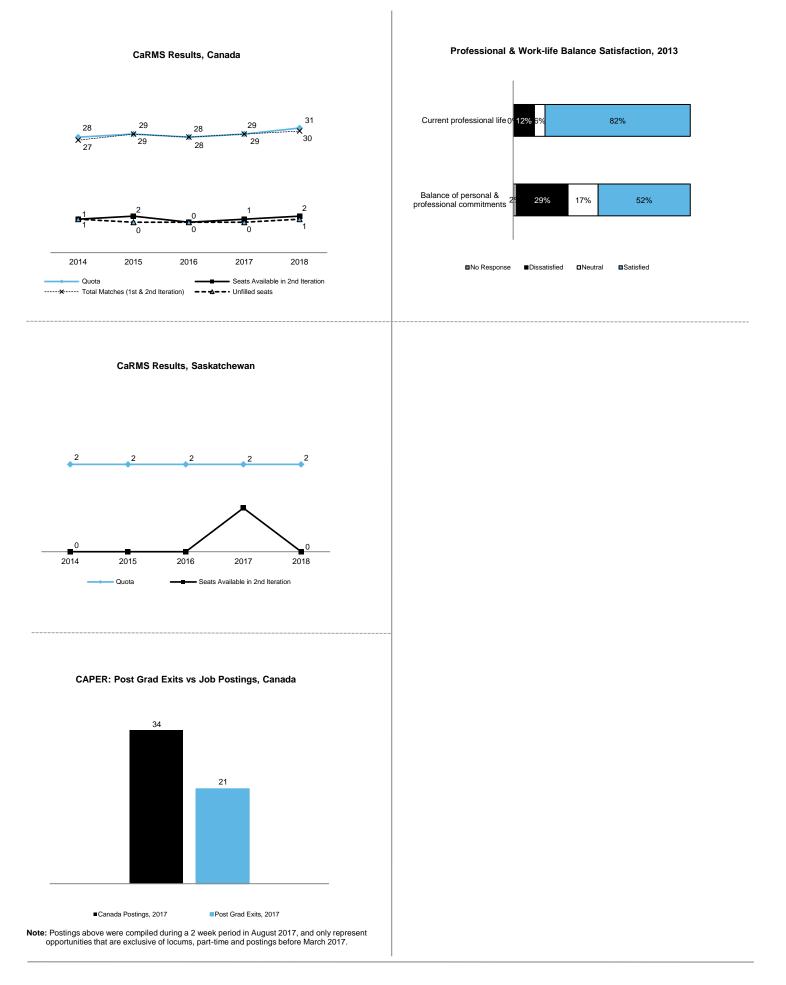












# **PLASTIC SURGERY**

### **Overview:**

Plastic surgery includes the management of major burns, reconstruction of congenital malformations, cosmetic surgery and other minor surgical procedures.

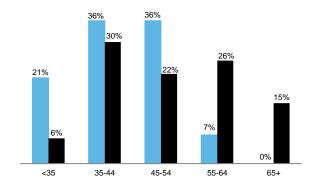
Plastic surgeons treat a wide variety of clinical disorders including congenital and developmental problems, trauma, cancer and degenerative diseases. Often their goal is not only to improve appearances but also to restore function. Depending on the type of practice, many procedures are done under local anesthetic on an outpatient basis.

Certification in plastic surgery requires completion of a 5 year Royal College-approved residency training program.

### **Key highlights:**

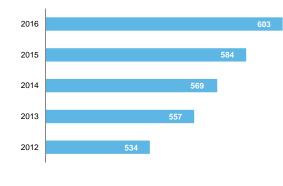
- Plastic surgeons in Canada worked a weekly average of 64.1 hours in 2017, 8.6 of which were on-call hours in direct patient care.
- The following communities may have plastic surgery services in Saskatchewan:
  - Regina
  - Saskatoon
- The U of S currently does not offer a plastic surgery training program.
- In 2017-18, 14 plastic and reconstructive surgeons practiced in Saskatchewan.

Age Demographics



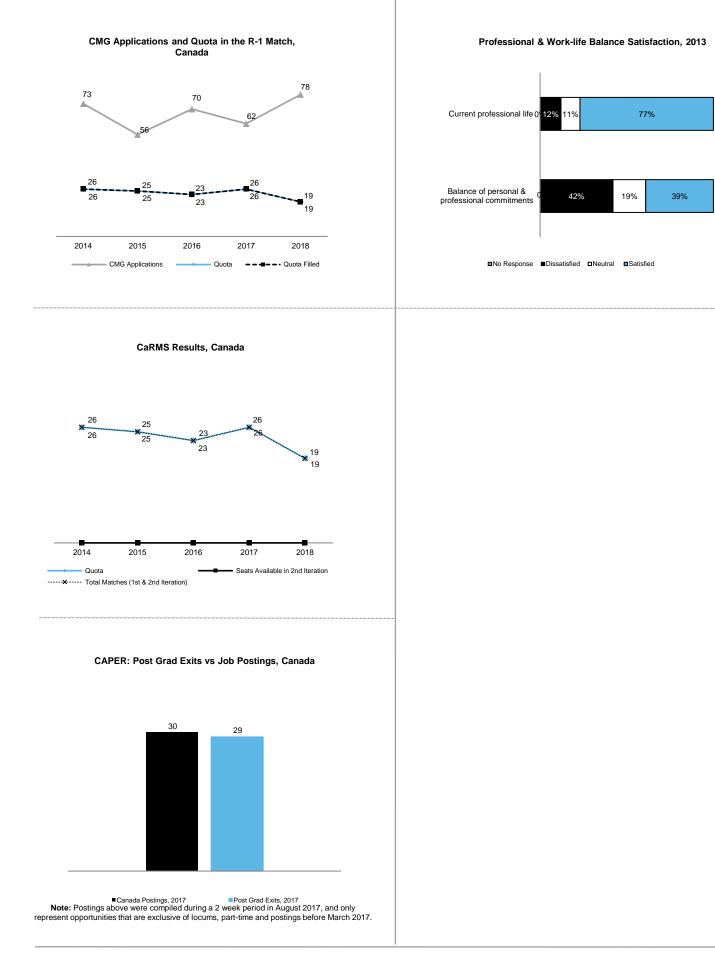
Plastic and Reconstructive Surgeons in Saskatchewan, 2017-18 Plastic Surgeons in Canada, 2017

Licensed Plastic Surgeons in Canada



CIHI: Licensed Plastic Surgeons in Canada

Average Payment (\$000's) \$575.8	Number of Physicians
\$575.8	
	14
\$1,046.6	
\$0.0	0
-	-
-	-
-	
-	-
\$0.0	0
	-
\$241.5	1
\$0.0	0
\$321.6	1
\$624.8	12
	- - - \$0.0 - \$241.5 \$0.0 \$321.6



# **PSYCHIATRY**

### **Overview:**

Psychiatry is the medical specialty that deals with the study, diagnosis, prevention, and treatment of mental illness, and emotional and behavioural disorders.

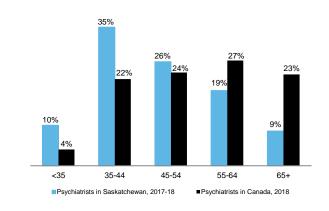
Psychiatrists use a combination of biological, psychological and social treatment methods to provide diagnosis and treatment plans for patients.

Psychiatrists are employed in general hospitals, outpatient clinics, psychiatric hospitals and in community office practice. They may specialize in areas such as addictions and substance abuse disorders, mood and anxiety disorders, schizophrenia or eating disorders. Other areas of interest include Aboriginal mental health, women's mental health, gender issues, cross-cultural psychiatry, sleep medicine, or psychosomatic medicine and the care of patients with cancer, heart disease and diabetes.

Certification in psychiatry requires completion of a 5 year Royal College-approved residency training program.

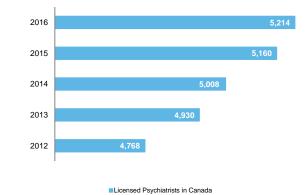
### Key highlights:

- Psychiatrists in Canada worked a weekly average of 49.5 hours in 2017, 4.2 of which were on-call hours in direct patient care.
- The following communities may have psychiatry services in Saskatchewan:
  - Lloydminster
  - Moose Jaw
  - North Battleford
  - Prince Albert
  - Regina
  - Saskatoon
  - Swift Current
  - Weyburn
  - Yorkton
- In 2018, the U of S quota for psychiatry postgraduate seats was 8. Training seats are available in Saskatoon and Regina.
- o In 2017-18, 75 psychiatrists practiced in Saskatchewan.

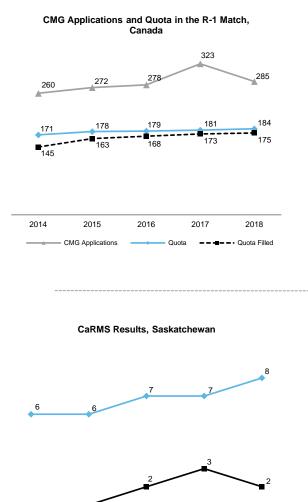


Age Demographics

Licensed Psychiatrists in Canada

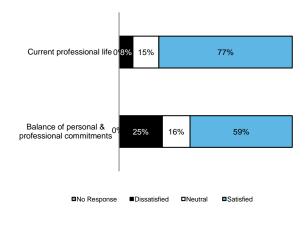


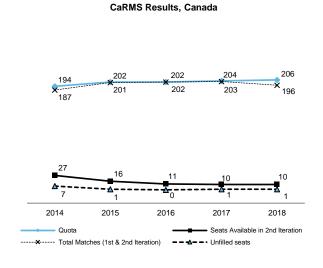
MSB Annual Statistical Report: Remuneration/Salary, 2017-18				
	Average Payment (\$000's)	Number of Physicians		
Physicians*	\$356.3	68		
Highest Paid	\$1,274.2			
Less than \$60,000	\$39.8	7		
\$60, 000-74,999	\$70.1	4		
\$75,000-99,999	\$89.6	3		
\$100,000-124,999	\$113.6	7		
\$125,000-149,999	\$139.6	4		
\$150,000-174,999	\$172.1	1		
\$175,000-199,999	\$183.4	6		
\$200,000-249,999	\$214.8	ç		
\$250,000-299,999	\$270.2	8		
\$300,000-349,999	\$329.1	4		
Over \$350,000	\$710.9	22		



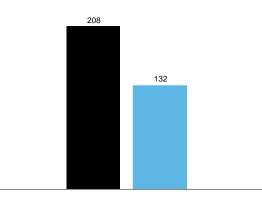
0 2014 2015 2016 2017 2018 → Quota Seats Available in 2nd Iteration







CAPER: Post Grad Exits vs Job Postings, Canada



Canadian Job Postings, 2017

Post Grad Exits, 2017

Note: Postings above were compiled during a 2 week period in August 2017, and only represent opportunities that are exclusive of locums, part-time and postings before March 2017.

# **PUBLIC HEALTH AND PREVENTIVE MEDICINE**

### **Overview**:

Public health and preventive medicine is the branch of medicine concerned with the health of the population. These specialists use population health knowledge and skills to play leading and collaborative roles in the maintenance and improvement of the health and wellbeing of the community. They measure the health needs of populations and develop strategies for improving health and well-being, through health promotion, disease prevention and health protection.

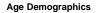
They work in places such as public health departments, hospitals, universities, family practice setting, public agencies, industry and non-governmental organizations.

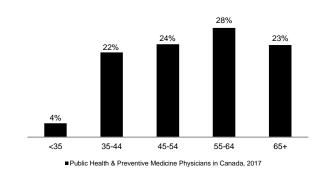
Certification in public health and preventative medicine requires completion of a 5 year Royal College-approved residency training.

### Key highlights:

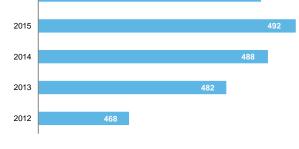
- Public health and preventive medicine worked a weekly average of 44.0 hours in 2017.
- The following communities may have public health and preventive medicine services in Saskatchewan:
  - La Ronge
  - Melfort
  - Moose Jaw
  - North Battleford
  - Prince Albert
  - Regina
  - Saskatoon
  - Swift Current
  - Weyburn
- In 2018, the U of S quota for public health and preventive medicine postgraduate seats was 1. This seat is available in Saskatoon.
- As of April 1, 2016, the annual starting wage for Medical Health Officers (MHO) is \$255,837 and \$225,138 for Deputy Medical Health Officers (DMHO) in Saskatchewan.

MHO Payment Grid*			
	Medical Health Officer (MHO)	Deputy Medical Health Officer (DMHO)	
Step 1	\$255,837	\$225,138	
Step 2	\$266,073	\$235,370	
Step 3	\$276,307	\$245,603	
Step 4	\$286,540	\$255,838	
Step 5	\$296,772	\$266,073	
* As of Ap	ril 1st, 2016		









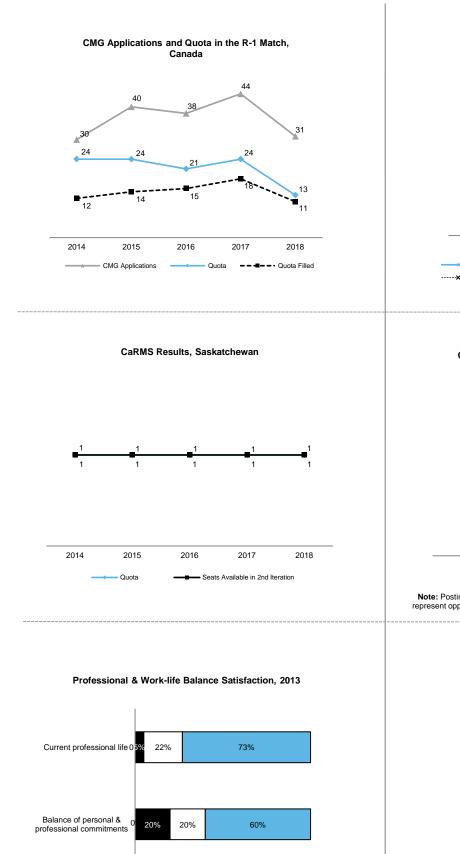
CIHI: Licensed Public Health & Preventive Medicine Physicians in Canada

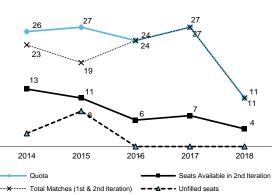
No Response

Neutral

Dissatisfied

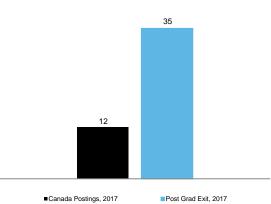
Satisfied





CaRMS Results, Canada

CAPER: Post Grad Exits vs Job Postings, Canada



Note: Postings above were compiled during a 2 week period in August 2017, and only represent opportunities that are exclusive of locums, part-time and postings before March 2017.

# **RADIATION ONCOLOGY**

### **Overview:**

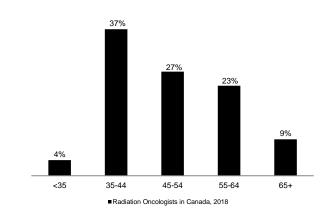
Radiation oncologists are medical specialists with unique knowledge, understanding and expertise in the diagnosis and care of patients with malignant disease. They are integrally involved in the formulation and execution of the management plan of cancer patients and therefore require specific knowledge and skills in the application of ionizing radiations to cancer treatment.

Typically, a radiation oncologist practices in a multidisciplinary fashion in close collaboration with general and subspecialty surgeons, medical and gynecological oncologists. Ambulatory patient care is the norm.

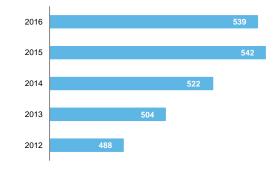
Certification in radiation oncology requires completion of a 5 year Royal College-approved residency training program.

- Radiation oncologists in Canada worked a weekly average of 54.7 hours in 2014, 3.3 of which were oncall hours in direct patient care.
- The following communities may have radiation oncology services in Saskatchewan:
  - Regina
  - Saskatoon
- The U of S currently does not offer a radiation oncology training program however the Ministry of Health may purchase a networked training seat from another province, for which the resident has a return of service to Saskatchewan upon completion of training.
- In 2016-17, the radiation oncology payment grid range was \$327,209-\$422,266. In addition to receiving a salary physicians may also receive a benefits package which includes but is not limited to a pension plan, extended healthcare coverage and vacation leave.



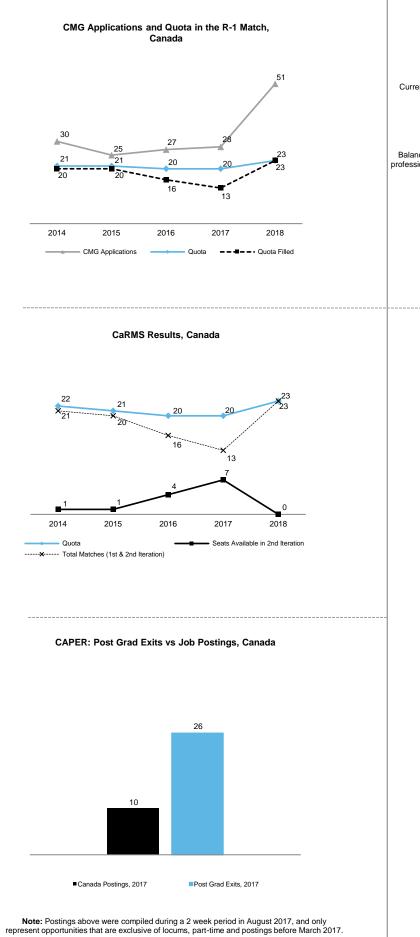


Licensed Radiation Oncologists in Canada





Saskatchewan Cancer Agency (SCA) Salary Grid*			
Classification (Pay Grade)	Annual Pay Per Oncologist		
Step 1	\$327,209		
Step 2	\$374,738		
Step 3	\$422,266		
* As of October 2016			



Professional & Work-life Balance Satisfaction, 2013

Current professional life	6%	17%	14%		63%
Balance of personal & professional commitments	6%	32	%	16%	46%

■No Response ■Dissatisfied ■Neutral ■Satisfied

# UROLOGY

### **Overview:**

Urology is a surgical subspecialty that focuses on the medical and surgical treatment of disorders and diseases of the female urinary tract and the male urogenital system.

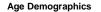
It involves diagnosis, endoscopy, surgery and lithotripsy. The most common clinical encounters involve prostate disease, renal dysfunction particular to surgical management (colic, stones), bladder dysfunction and urinary tract infections.

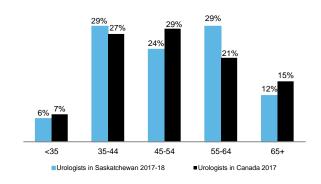
A urologist must understand the normal function and the pathological processes and diseases that affect the adrenal gland, the kidneys, ureters, bladder, urethra in the male and female, and the prostate and external genitalia of the male. This includes an understanding, appropriate to the practice of urology of normal development and embryology, biochemistry and pharmacology, physiology, anatomy, and gross and microscopic pathology of the genito-urinary tract.

Certification in urology requires completion 5 year of Royal College-approved residency training program.

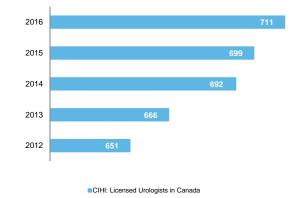
### **Key highlights:**

- Urologists in Canada worked a weekly average of 66.6 hours in 2017, 10.7 of which were on-call hours in direct patient care.
- The following communities may have urology services in Saskatchewan:
  - Moose Jaw
  - Prince Albert
  - Regina
  - Saskatoon
  - Swift Current
- The U of S currently does not offer a urology training program however the Ministry of Health may purchase a networked training seat from another province, for which the resident has a return of service to Saskatchewan upon completion of training. In 2017, the province purchased 1 urology training seat at the University of Dalhousie.
- In 2017-18, 17 urologists practiced in Saskatchewan.





Licensed Urologists in Canada



MSB Annual Statistical Report: Remuneration/Salary, 2017-18				
	Average Payment (\$000's)	Number of Physicians		
Physicians*	\$454.6	17		
Highest Paid	\$1,116.6			
Less than \$60,000	\$0.0	0		
\$60, 000-74,999	-	-		
\$75,000-99,999	\$83.7	1		
\$100,000-124,999	\$0.0	0		
\$125,000-149,999	-	-		
\$150,000-174,999	163	1		
\$175,000-199,999	191	1		
\$200,000-249,999	\$231.1	1		
\$250,000-299,999	-	-		
\$300,000-349,999	\$331.1	2		
Over \$350,000	\$581.7	11		
* Physicians receiving \$60K or more in MSP payments.				



# **SPECIALTY PROFILES: Medicine Subspecialties**

Information compiled in this section of the guide includes the subspecialties available in the CaRMS Medicine Subspecialty Match, which internal medicine residents may apply for in their third year residency training.

# CARDIOLOGY

### **Overview:**

Cardiologists are highly specialized practitioners in a dynamic field who place a premium on mastery and competence. They use their hands for invasive procedures and other manual tasks, but they also apply cognitive skills to the physical exam and other diagnostic procedures. Their daily tasks are diverse. With the pace of new developments (both in medical technology and in broader treatment trends) a high level of challenge and diversity, as well as significant intellectual demands are associated with this specialty.

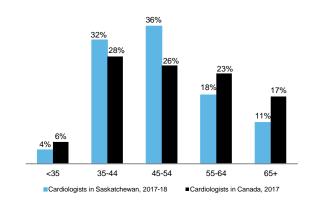
Cardiologists are expected to act as consultants in cardiovascular disease to all branches of medicine and pediatrics. They must be proficient in the management of acute coronary care problems, participate in the medical and surgical therapy of coronary artery disease and deal with the pre- and post-operative evaluation of cardiac surgical cases. This specialist must deal with cardiovascular problems associated with hypertensive, rheumatic and congenital heart disease and with cardiomyopathies.

Certification in cardiology requires completion of 3 core years of internal medicine or paediatrics residency, followed by an additional 3-4 years of training in a Royal College-approved cardiology residency training program, for a total of 6-7 years of postgraduate residency education.

### **Key highlights:**

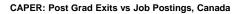
- Cardiologists in Canada worked a weekly average of 66.2 hours in 2017, 9 of which were on-call hours in direct patient care.
- The following communities may have cardiology services in Saskatchewan:
  - Moose Jaw
  - Regina
  - Saskatoon
- In 2018, the U of S quota for cardiology postgraduate seats was 2. Training seats are available in Saskatoon.
- In 2017-18, 29 cardiologists practiced in Saskatchewan.

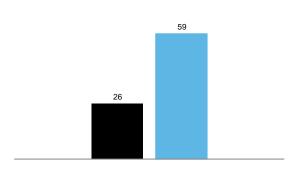




	Average Payment (\$000's)	Number of Physicians
Physicians*	\$842.3	28
Highest Paid	\$1,824.3	
Less than \$60,000	\$31.8	1
\$60, 000-74,999	\$68.0	1
\$75,000-99,999	\$0.0	(
\$100,000-124,999	-	-
\$125,000-149,999	144	1
\$150,000-174,999	-	-
\$175,000-199,999	-	-
\$200,000-249,999	\$218.9	
\$250,000-299,999	-	-
\$300,000-349,999	314	1
Over \$350,000	\$951.7	24

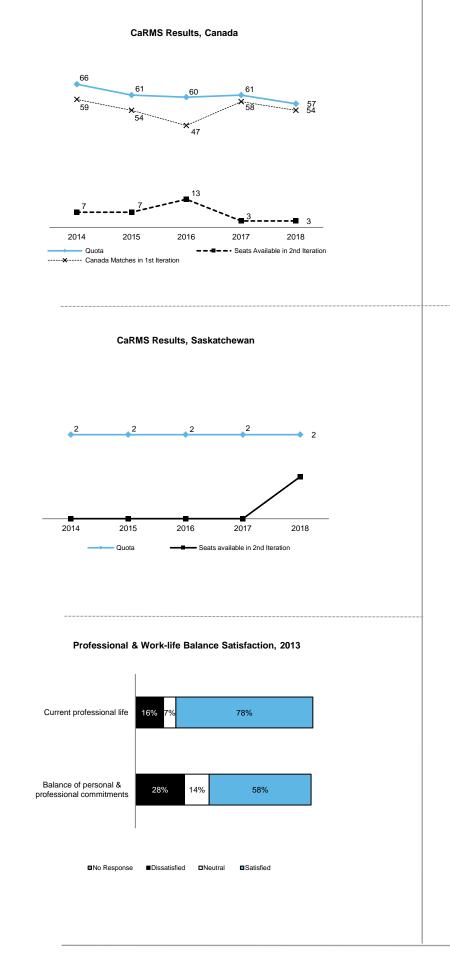
Note: Payments above are based on fee-for-service and non fee-for-service (shadow) billings, which may impact the average payment stated.



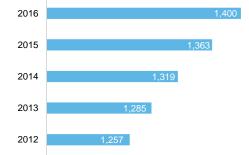


Canada Postings, 2017 Post Grad Exits, 2017

Note: Postings above were compiled during a 2 week period in August 2017, and only represent opportunities that are exclusive of locums, part-time and postings before March 2017.



CIHI: Licensed Cardiologists in Canada



# GASTROENTEROLOGY

### **Overview:**

Gastroenterology is a subspecialty of internal medicine and/or pediatrics dealing with the diagnosis and treatment of diseases and disorders related to the digestive system including the esophagus, stomach, small intestine and large intestine (colon), gallbladder, pancreas and liver.

It is a procedures oriented specialty that requires some manual dexterity and the ability to analyze problems and data.

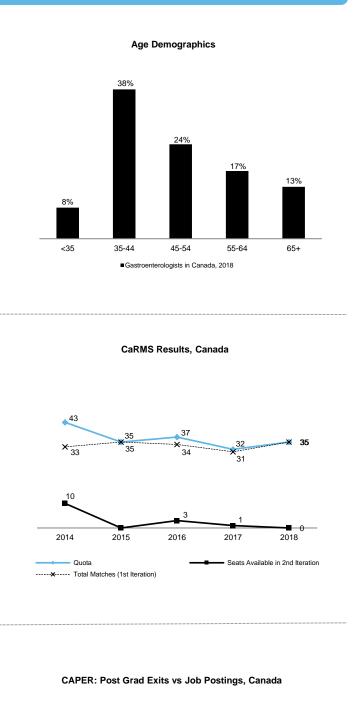
The gastroenterologist is generally not the primary care physician, but instead, part of a health care team that provides a diagnostic and therapeutic function in patient care.

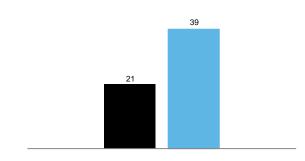
Gastroenterologists do not perform surgery; however, they do perform procedures such as liver biopsies, endoscopic ("scope") examinations of the esophagus, stomach, small and large bowel. Gastroenterologists frequently work with surgeons in helping them select the best operation for a particular patient.

Certification in gastroenterology requires completion of 3 core years of internal medicine or paediatrics residency, followed by an additional 2 years of training in a Royal College-approved gastroenterology residency training program, for a total of 5 years of postgraduate residency education.

### Key highlights:

- Gastroenterologists in Canada worked a weekly average of 65.1 hours in 2017, 10.3 of which were oncall hours in direct patient care.
- The following communities may have gastroenterology services in Saskatchewan:
  - Prince Albert
  - Regina
  - Saskatoon
  - Yorkton
- The U of S currently does not offer a gastroenterology training program.
- In 2016-17, the average payment for gastroenterologists in Saskatchewan was \$733,252 per annum.

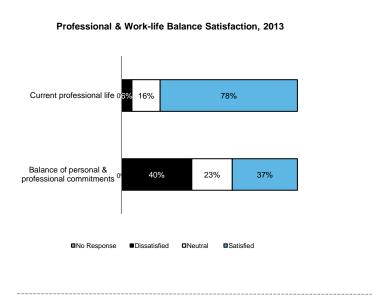




Canada Postings, 2017

Post Grad Exits, 2017

Note: Postings above were compiled during a 2 week period in August 2017, and only
represent opportunities that are exclusive of locums, part-time and postings before March 2017.



CIHI: Licensed Gastroenterology Workforce in Canada



# **GENERAL INTERNAL MEDICINE**

### **Overview:**

General internal medicine (GIM) physicians diagnose and manage diseases involving any of the organ systems and are specially trained to manage seriously ill patients suffering from advanced illness and/or diseases of more than one system.

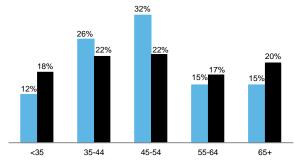
In the hospital and ambulatory setting, internists manage acute and chronic illness of their patients and other patients that have been referred to them by other practitioners such as family physicians. They are also trained to meet the special needs of the geriatric population.

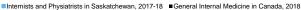
After completing medical school, to become an internist requires additional training that takes 4 years. Those who choose to subspecialize are required to complete 2 years of subspecialty training in General Internal Medicine (GIM), which they can begin once completing the 3 core years of the internist program, for a total of 5 years of postgraduate education.

### Key highlights:

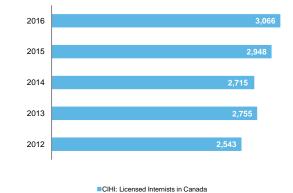
- Internists in Canada worked a weekly average of 69.1 hours in 2017,14.5 of which were on-call hours in direct patient care.
- The following communities may have general internal medicine services:
  - Estevan
  - Lloydminster
  - Moose Jaw
  - North Battleford
  - Prince Albert
  - Regina
  - Saskatoon
  - Swift Current
  - Weyburn
  - Yorkton
- In 2018, the U of S quota for general internal medicine postgraduate seats was 3. Training seats are available in Saskatoon.
- In 2017-18, 192 internists and physiatrists practiced in Saskatchewan.



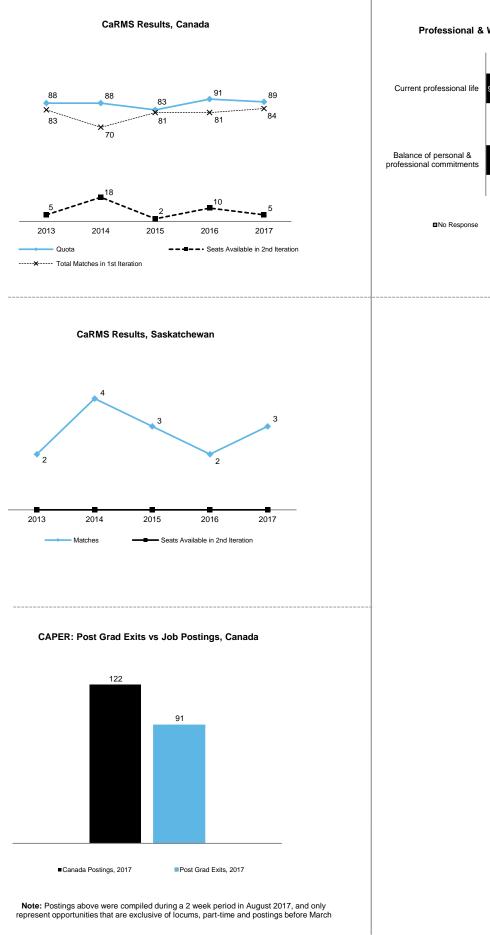








	Average Payment (\$000's)	Number of Physicians
Physicians**	\$388.4	164
Highest Paid	\$1,307.6	
Less than \$60,000	\$29.5	28
\$60, 000-74,999	\$67.5	2
\$75,000-99,999	\$83.9	8
\$100,000-124,999	\$113.9	11
\$125,000-149,999	\$136.5	ç
\$150,000-174,999	\$162.3	10
\$175,000-199,999	\$184.4	7
\$200,000-249,999	\$229.4	16
\$250,000-299,999	\$275.7	11
\$300,000-349,999	\$324.6	15
Over \$350,000	\$627.3	73



Professional & Work-life Balance Satisfaction, 2013

Current professional life	9% 12%		79%	
Balance of personal & professional commitments	23%	23%	53%	]
■No Response	■Dissatisfie	ed <b>□</b> Neutra	al Satisfied	

# HAEMATOLOGY

### **Overview:**

Haematology is a subspecialty of internal medicine and is concerned with the nature, function, and diseases of the blood. Haematology uses highly developed technology to make specific diagnoses and treat illnesses occurring in all organ systems.

The haematologist must be able to interpret a wide range of laboratory procedures. They require knowledge of the basic medical sciences (e.g., physiology, pharmacology, biochemistry, immunology), in addition to clinical medicine and relevant aspects of pathology. Since advances come rapidly in this field, physicians are required to stay current with scientific knowledge and laboratory procedures.

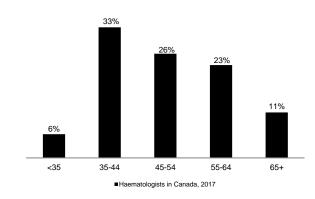
Haematologists treat all age groups and should be able to provide consultant advice in diagnosis and management of patients of any age. Close patient contact is common and haematologic diseases are often serious or fatal.

Haematology is an academic pursuit, closely related to medical oncology with which its training programs are connected.

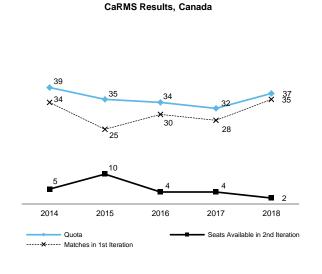
Certification in haematology requires completion of 3 core years of internal medicine or paediatrics residency, followed by an additional 2-3 years of training in a Royal College-approved haematology residency training program, for a total of 5-6 years of postgraduate residency education.

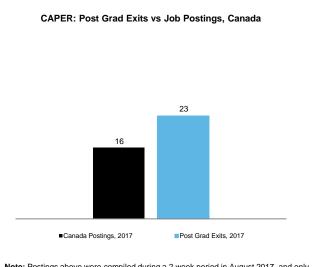
- Haematologists in Canada worked a weekly average of 57.4 hours in 2014, 8.8 of which were on-call hours in direct patient care.
- The following communities may have haematology services in Saskatchewan:
  - Regina
  - Saskatoon
- The U of S currently does not offer a haematology training program.
- In 2016-17, the haematology payment grid range was \$327,209 - \$422,266. In addition to receiving a salary, physicians may also receive a benefits package which includes but is not limited to a pension plan, extended healthcare coverage and vacation leave.



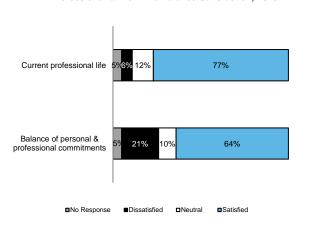


Saskatchewan Cancer Agency (SCA) Salary Grid*				
Classification (Pay Grade) Annual Pay Per Haematologist				
Step 1	\$327,209			
Step 2	\$374,738			
Step 3	\$422,266			
* As of October 2016				





Note: Postings above were compiled during a 2 week period in August 2017, and only represent opportunities that are exclusive of locums, part-time and postings before March 2017.



Professional & Work-life Balance Satisfaction, 2013

# **MEDICAL ONCOLOGY**

### **Overview:**

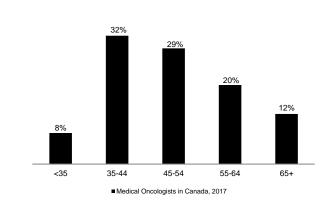
Medical oncology is a subspecialty of internal medicine that focusses on the diagnosis and treatment of cancer.

Oncologists are tasked with managing therapeutic programs for patients such as chemotherapy and radiotherapy. They also provide services such as counselling, physiotherapy and palliative care.

Certification in medical oncology requires completion of 3 core years of internal medicine residency, followed by an additional 2 years of training in a Royal College-approved medical oncology residency training program, for a total of 5 years of postgraduate residency education.

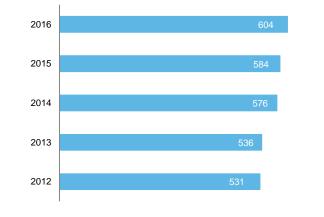
### Key highlights:

- Medical oncologists in Canada worked a weekly average of 56.5 hours in 2014, 4 of which were on-call hours in direct patient care.
- The following communities may have medical oncology services in Saskatchewan:
  - Regina
  - Saskatoon
- The U of S currently does not offer a medical oncology training program; however the Ministry of Health may purchase a networked training seat from another province, for which the resident has a return of service upon completion of training. The province purchased 1 medical oncology training seat at the University of Dalhousie for the 2018 CaRMS Medicine Subspecialty Match.
- 2016-17, the haematology payment grid range was \$327,209 - \$422,266. In addition to receiving a salary, physicians may also receive a benefits package which includes but is not limited to a pension plan, extended healthcare coverage and vacation leave.

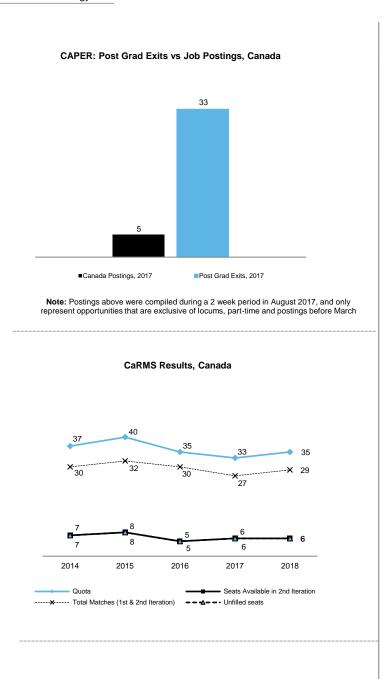


Age Demographics

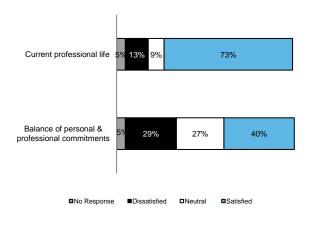
### CIHI: Licensed Medical Oncology Workforce in Canada



Saskatchewan Cancer Agency (SCA) Salary Grid for Oncologists		
Classification (Pay Grade)	Average Payment	
Step 1	\$327,209	
Step 2	\$374,738	
Step 3	\$422,266	
* As of October 2016.		



Professional & Work-life Balance Satisfaction, 2013



# **NEPHROLOGY**

### **Overview:**

Nephrology is a subspecialty of internal medicine. Practitioners diagnose and treat diseases of the kidneys and urinary system. Nephrologists are motivated by the opportunity to restore chronically ill patients to productive lives and are often challenged by life-and-death situations. The practice of nephrology is closely linked to a teaching hospital so these specialists incorporate a major component of teaching and research into their overall activity profile. This may be viewed as one of the attractions of nephrology, in as much as it allows for tremendous diversity and flexibility.

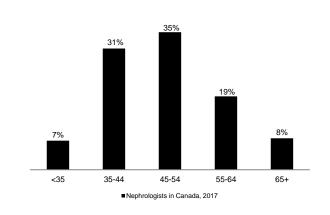
Nephrologists care for patients with kidney disease (including the management of dialysis and renal transplantation), and disturbances with acid-base, fluid and electrolyte metabolism.

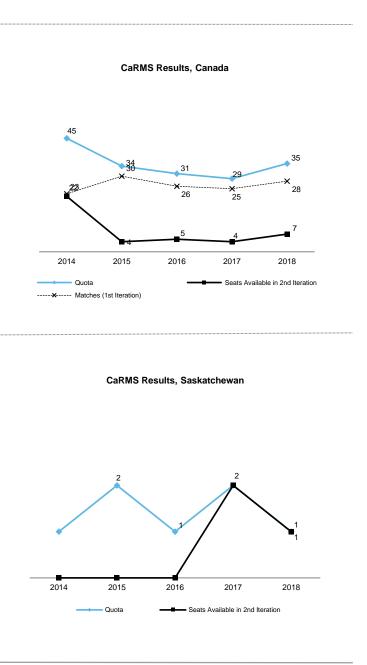
They work in a variety of health care settings including acute and chronic care hospitals, dialysis units (hemodialysis and peritoneal dialysis), as well as ambulatory care clinics (general nephrology, predialysis, renal transplantation). They should function as a member of a multi-disciplinary team, effectively collaborating with other health professionals.

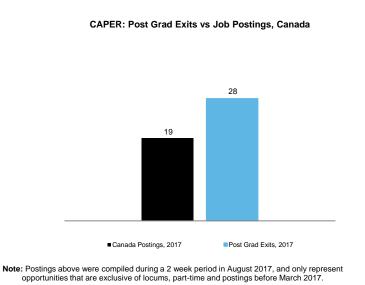
Certification in nephrology requires completion of 3 core years of internal medicine or paediatrics residency, followed by an additional 2 years of training in a Royal College-approved nephrology residency training program, for a total of 5 years of postgraduate residency education.

- Nephrologists in Canada worked a weekly average of 66.6 hours in 2017, 9.3 of which were on-call hours in direct patient care.
- The following communities may have nephrology services in Saskatchewan:
  - Regina
  - Saskatoon
- In 2018, the U of S did not host any seats for nephrology.
- In 2016-17, the average payment for nephrologists in Saskatchewan was \$552,571.

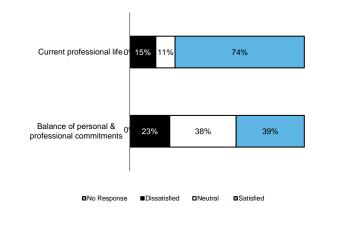




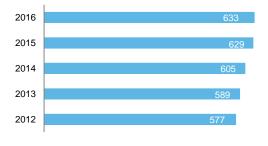








### **CIHI: Licensed Nephrology Workforce in** . Canada



# RESPIROLOGY

### **Overview:**

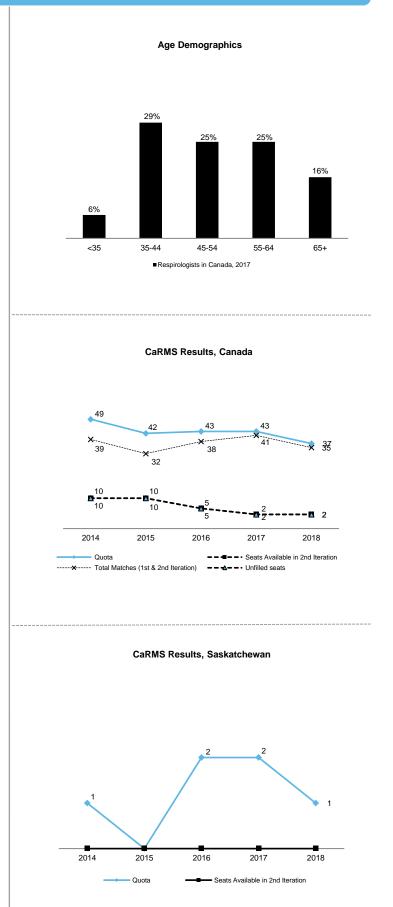
Respirology medicine is a subspecialty of internal medicine which deals with the diagnosis and treatment of diseases of the respiratory system.

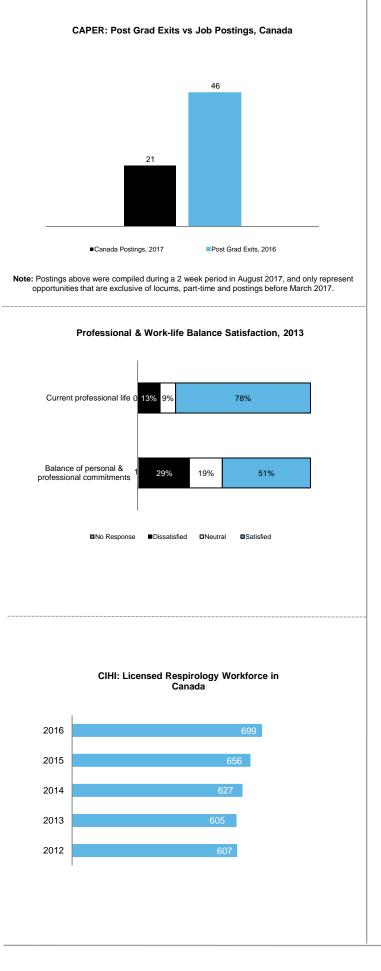
This specialty offers a balance between direct patient care, doing procedures and working with technology. Since pulmonary medicine touches upon other subspecialties, it requires in-depth knowledge of internal medicine.

Respirologists may specialize in either adult or pediatric respiratory medicine.

Certification in respirology requires completion of 3 core years of internal medicine or paediatrics residency, followed by an additional 2 years of training in a Royal College-approved respirology residency training program, for a total of 5 years of postgraduate residency education.

- Respirologists in Canada worked a weekly average of 70.1 hours in 2017, 13.3 of which were on-call hours in direct patient care.
- The following communities may have respirology services in Saskatchewan:
  - Regina
  - Saskatoon
- In 2018, the U of S quota for respirology postgraduate seats was 1. Training seat was available in Saskatoon.
- In 2016-17, the average payment for respirologists in Saskatchewan was approximately \$283,433 per year.





# RHEUMATOLOGY

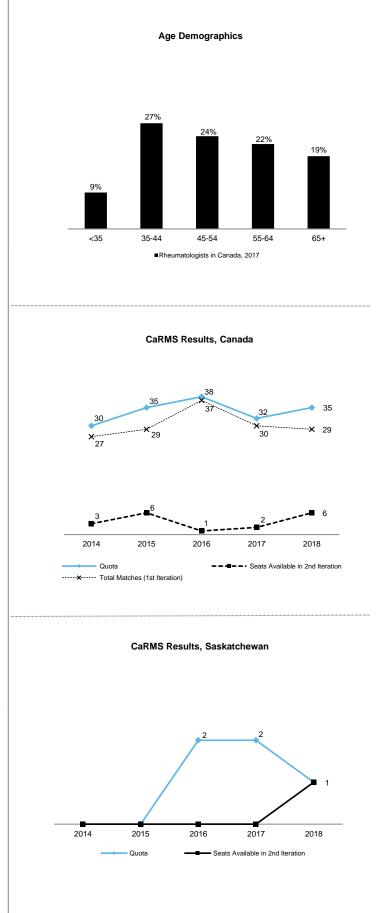
### **Overview:**

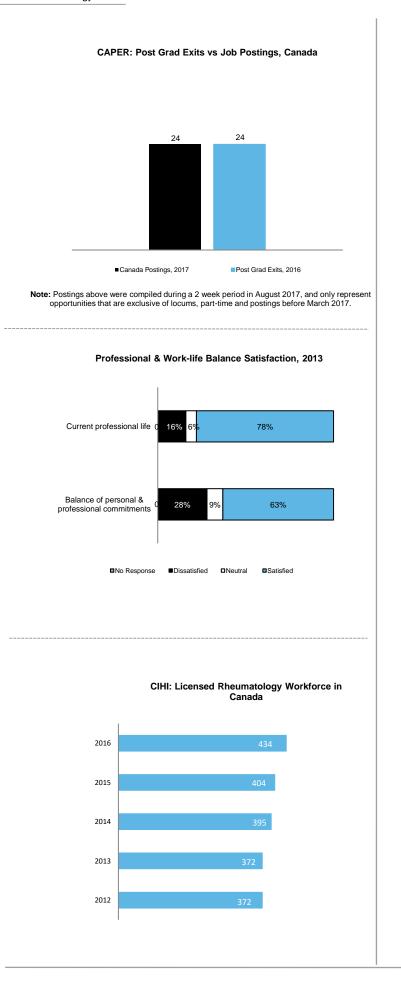
Rheumatology is concerned with the diagnosis and treatment of rheumatic diseases, which may involve many systems, as well as joint, muscle and skeletal disorders.

A rheumatologist must be effective in the assessment, investigation, management, and rehabilitation of patients with: acute and chronic forms of arthritis; soft tissue rheumatic disorders; collagen-vascular diseases and vasculitides; spinal and regional pain problems; and the musculoskeletal manifestations of systemic disease.

Certification in rheumatology requires completion of 3 core years of internal medicine or paediatrics residency, followed by an additional 2 years of training in a Royal College-approved rheumatology residency training program, for a total of 5 years of postgraduate residency education.

- Rheumatologists in Canada worked a weekly average of 57.7 hours in 2017, 6.7 of which were on-call hours in direct patient care.
- The following communities may have rheumatology services in Saskatchewan:
  - Regina
  - Saskatoon
- In 2018, the U of S quota for rheumatology postgraduate seats was 1. The training seat was available in Saskatoon.
- In 2016-17, the average payment for rheumatologists in Saskatchewan was approximately \$216,378 per year.





# WORK HOURS AND PAYMENTS BY SPECIALTY

This chart provides weekly average hours (including on-call hours in direct patient care) worked by physicians (Canada-wide) and annual average payments made to physicians in Saskatchewan by specialty:

PGY1 Specialties	Average Weekly Work Hours (Canada) <sup>1</sup>	Average Annual Payment/Grid (Saskatchewan) <sup>2</sup>
Anaesthesiology	67.5	\$371,300
Dermatology	57.7	\$301,000
Diagnostic Radiology	60.1	\$437,600
Emergency Medicine	53.1	\$371,977 - \$420,174 <sup>i</sup>
Family Medicine	55.9	\$249,800
General Pathology	47.2	\$346,477 - \$393,893 <sup>i</sup>
General Surgery	72.7	\$386,300
Neurology	67.9	\$350,000
Neurosurgery	64.5	\$604,100
Nuclear Medicine	48.6	Unavailable <sup>ii</sup>
Obstetrics and Gynecology	65.7	\$402,900
Ophthalmology	57.9	\$1,246,000
Orthopedic Surgery	64.2	\$559,300
Otolaryngology	56.7	\$579,500
Paediatrics	58.5	\$190,500
Physical Medicine and Rehabilitation	53.7	Unavailable <sup>ii</sup>
Plastic Surgery	64.1	\$575,800
Psychiatry	49.5	\$356,300
Public Health and Preventive Medicine	44.0	\$225,138 - \$296,772 <sup>III</sup>
Radiation Oncology	54.7	\$327,209 - \$422,266 <sup>iv</sup>
Urology	66.6	\$454,600
Medical Subspecialties		
Cardiology	66.2	\$842,300
Gastroenterology	65.1	\$733,251
General Internal Medicine	69.1	\$388,400
Haematology	57.4	\$327,209 - \$422,266 <sup>iv</sup>
Nephrology	66.6	\$552,571
Medical Oncology	56.5	\$327,209 - \$422,266 <sup>iv</sup>
Respirology	70.1	\$283,433
Rheumatology	57.7	\$216,378

1: Source: CMA Specialty Profiles; work hours outsourced from the 2014 or 2017 National Physician Survey, where updated.

2: Source: Medical Services Branch (MSB) Annual Statistical Report, 2017-18; based on both fee-for-service and non-fee-for-service billings (unless stated otherwise: i - iv). i: Based on MSB Pay ment Grid, 2016.

ii: Pay ment information is unavailable due to the small sample size of physicians in this specialty.

iii: Based on MSB Pay ment Grid for Medical Health Officers (MHO) and Deputy Medical Health Officers, 2016-17.

iv: Based on Saskatchewan Cancer Agency (SCA) Payment Grid, 2016.

# REFERENCES

SECTIONS	REFERENCES
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Key Highlights	Work hours Canadian Medical Association (CMA) Specialty Profiles https://www.cma.ca/En/Pages/specialty-profiles.aspx
	<i>Community Services</i> Physician Registry, College of Physicians and Surgeons of Saskatchewan (CPSS) - <u>https://www.cps.sk.ca/imis/</u> Regional Health Authorities
	<i>Post-graduate Seats</i> College of Medicine, University of Saskatchewan, 2018
	Physician Payments Medical Services Branch (MSB) Annual Statistical Report, Ministry of Health, Government of Saskatchewan, 2017-18 <u>https://www.saskatchewan.ca/government/government-</u> <u>structure/ministries/health/other-reports/annual-report-archive#step-3</u> Medical Services Branch (MSB) Payment Grids, 2016 Saskatchewan Cancer Agency (SCA) Payment Grids, 2016
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	Canadian Medical Association (CMA) Specialty Profiles https://www.cma.ca/En/Pages/specialty-profiles.aspx
Licensed Physician Workforce in Canada	Medical Workforce Supply Overview, Canadian Institute for Health Information (CIHI) http://www.royalcollege.ca/rcsite/health-policy/medical-workforce- knowledgebase/mwk-supply-overview-e
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Professional & Work-Life Balance Satisfaction	Canadian Medical Association (CMA) Specialty Profiles <a href="https://www.cma.ca/En/Pages/specialty-profiles.aspx">https://www.cma.ca/En/Pages/specialty-profiles.aspx</a>

#100-311 Wellman Lane, Saskatoon, SK, Canada S7T 0J1

Toll Free: 1-888-415-3627 306-933-5000 info@saskdocs.ca

# saskdocs.ca

