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# **Executive Summary**

In April 2018, members of Resident Doctors of Canada (RDoC) were asked to share their personal experience and opinions on residency training by completing a 70-question survey. The content of the survey was provided in both French and English. The questions were based on three comprehensive dimensions: residency training, wellness, and medical practice. These three sections included a broad array of relevant and timely issues for postgraduate medical education, including topics such as the importance of generalism, entry routes, medical assistance in dying (MAiD), duty hours, the transition to competency-based medical education (CBME), program transfers, resiliency, mental health, and career intentions following residency training.

The 2018 RDoC survey was completed by 833 residents for an overall response rate of 8.3%. Survey responses were then weighted to reflect the gender, training faculty of medicine, and broad training specialty group of the RDoC membership.

Highlights from the results are provided in this summary, followed by the complete survey outcomes. When a reference is made to "respondents" this reflects unweighted results. Conversely, when a reference is made to "residents", this is in reference to findings that were weighted to reflect the population characteristics of the RDoC membership.

# **Medical Education and Residency Training**

Survey questions aimed at understanding the **educational pathway** leading to residency revealed that the majority of residents, 64%, are exposed to fifteen or fewer entry route medical specialties during their MD degrees. Only 9.2% decide on their first-choice specialty for the CaRMS R-1 residency match before initiating their MD education, while more than a third, 39.1%, make that choice during their final year.

Reporting on their **current postgraduate training experience**, 65.9% of residents rate the level of observation they receive from preceptors as "sufficient" or "just enough". In judging the quality of that feedback, close to two thirds, 66.4%, of residents find it "sometimes helpful"; an additional 22.2% perceive it as "almost always helpful".

Following the Royal Assent in June 2016 of Bill C-14, national legislation on **medical assistance in dying** (MAiD), medical practitioners, educators, and trainees have had to rethink their scope of practice. On this topic, the survey found that 50.2% of residents have been offered an educational or informational session on MAiD and, in the majority of cases, this training is tailored specifically for a resident physician audience. 44.8% of residents whose specialty/institution/preceptors take part in MAiD observe or are involved in MAiD discussions or processes.

**Competency-based medical education (CBME)**, an approach defined as preparing physicians for practice that is fundamentally oriented towards graduate outcome abilities and organized around competencies, is reported as being rolled out in slightly more than 30% of the residents' training programs. Of the residents, 17.0% are formally participating in this new training model while the remaining 13.2% are still training under

the original model. 84.6% of residents who have seen a CBME rollout in their program agree that CBME is advocated for and supported within their program. 69.9% report that their program welcomes feedback from residents on CBME.

The survey findings show that over a third of residents have considered **transferring to another training program**. However, only one in ten of those completed a program transfer (about 3.3% of the total resident population). The most frequent reasons for transfer include a change in career goals or specialty interest (70.4%), as well as experiencing intimidation or harassment (32.4%). The top reasons residents do not proceed with a program transfer are that they prefer their original program (44.3%), as well as the complexity of the transfer process itself (20.1%). On a related topic, a high percentage of residents, 88.3%, say that they would reapply to the same specialty in which they are currently training. 62.1% would choose to become a physician again if they could revisit their career choice.

On average, residents estimate that their **total debt** following the completion of residency training is about \$127,496. Nearly one fifth of residents expect to be debt free by the end of their postgraduate training.

#### **Resident Wellness**

The survey results highlight the challenges many residents face in **achieving and maintaining personal wellness.** Only 34.2% of residents report that their work schedule leaves them enough time for their personal and/or family life. 71.6% of residents are in training programs where they work 60 or more hours per week, with close to one in five (18.6%) working 80 or more hours a week.

Most residents, 80.3%, **sleep** six or more hours per night when not on call, which is consistent with the past three RDoC survey cycles. Based on the two weeks preceding the survey, only a minority of residents, 28.2%, have no trouble falling asleep, staying asleep, or sleeping too much. Taken as a whole, these findings may help explain why nearly one in five (19.7%) residents admits to a work-related medical error that had reached a patient due to fatigue.

The majority of residents, 51.9%, experience definitive symptoms of **burnout** that range from physical and emotional exhaustion to feeling completely burned out and in need of help. In contrast, most residents have high levels of resilience: 87.6% are often or nearly always able to adapt when changes occur; and, 86.5% are often or nearly always able to bounce back after an illness, injury, or other hardship.

More than three quarters of residents have experienced at least one form of **harassment and intimidation** in the preceding year. Yet, only 10.4% of those used their institutions' resources for support. Male residents reported a higher frequency of harassment and intimidation than women: 85.5% versus 71.4%, respectively.

**Patients were cited as the most common source of intimidation and harassment**, with 77.1% of residents reporting an experience in the preceding 12 months. The most common form of harassment or intimidation is verbal comments, affecting 94.6% of residents who are victims of these behaviors. Of those who use their

program, medical school or university's resources to deal with harassment and intimidation, 62.1% rate these resources as inadequate.

Two survey questions assessed symptoms of **depression** over a two-week reference period. Results show that 13.7% and 10.8% of residents are bothered more than half the days or nearly every day by having little interest or pleasure in doing things and feeling down, depressed, or hopeless. The most significant reported barriers to seeking mental health care are a lack of control over one's own schedule (59.4%), and the existing culture in medicine (24.9%).

More than one in seven residents has experienced thoughts about **suicide** in the last year, while 2.5% of the resident population has seriously considered suicide. Trainees in laboratory medicine have disproportionally higher rates of thoughts of suicide compared to residents in family medicine, medicine, and surgical specialties.

When asked about personal use of **drugs and alcohol**, nearly 15% of residents has not consumed drugs or alcohol in the preceding year. Of those who did, approximately 16.1% reported at least one instance where they felt that their use had a harmful effect on their physical health during the same period.

# **Career Intentions and Practice Management**

Residents report a high level of agreement with the principles of **generalism**. When asked to consider its importance, 82.4% give it a score of 7 or more on a scale of 1 to 10, where 10 is 'Very important'. Presented with four scenarios on the topic of generalism, such as seeing undifferentiated and undiagnosed patients, over 68% of residents indicate their intention of integrating all four examples of generalism in future medical practice.

When asked about **career intentions** following residency training, half of residents say that "proximity to family" is the leading reason for selecting a place to practice medicine. The majority of residents (65.0%) intend to stay and practice in the province where they are training.

Once in practice, 18.5% of residents intend to **locum outside their province or territory of primary practice**. Of those not currently planning to locum outside their future province or territory of primary practice, 52% would locum if no additional license applications were required.

On the general topic of **remuneration**, 54.3% of residents are willing to practice with reduced clinical autonomy in exchange for a salaried compensation model that includes health benefits, pension, vacation time, and other benefits. The salaried model was the most appealing payment schedule among residents.

Physicians often participate in **competing professional activities**. Residents anticipate spending two thirds of their time conducting clinical work. Teaching, administration, and research follow in decreasing order of priority.

# **General Conclusions**

The 2018 RDoC National Resident Survey generated new data that provided valuable insights reflective of resident physician views and the challenges they face in key areas of their medical training.

The results of the 2018 RDoC National Resident Survey will be useful for the development of position papers, informative materials, and initiatives for advocacy with our stakeholders to further shape the landscape of medical education.

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#### 1.1 About Resident Doctors of Canada

Resident Doctors of Canada (RDoC) represents over 10,000 resident doctors across Canada. Established in 1972, we are a not-for-profit organization providing a unified, national voice for our members training in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, the Maritime Provinces, and Newfoundland. Residents within each region are represented by one of seven Provincial Housestaff Organizations (PHOs). RDoC collaborates with other national health organizations to foster excellence in training, wellness, and patient care. We cultivate meaningful dialogue with our members and the PHOs to provide the perspective of resident doctors on national medical education issues. We strive to optimize the ongoing education and professional development of resident doctors, with the ultimate goal of ensuring the best health and care for patients.

# 1.2 RDoC National Resident Survey Team

- Dr. Melanie Bechard, 2017-18 RDoC President and Team Co-Chair
- Dr. Michael Arget, 2017-18 RDoC Vice-President and Team Co-Chair
- Dr. Jordyn Lerner, 2017-18 RDoC Practice Committee Representative
- Dr. Adele Duimering, 2017-18 RDoC Training Committee Representative
- Dr. Tehmina Ahmad, 2017-18 RDoC Wellness Committee Representative
- Dr. Alexandra Fottinger, Member-at-Large
- Irving Gold, RDoC Executive Director
- Staff Support provided by: Beth Sneyd, Todd Coopee, Dr. Yannick Fortin

# 1.3 Methodology

#### 1.3.1 Survey Design

Survey development for the 2018 RDoC National Resident Survey questionnaire was coordinated by the Survey Team. The committee representatives led an initial phase of consultation on survey content with their respective RDoC committees. Survey themes and draft questions proposed by the committees were then assessed by the Survey Team. After identifying a shortlist of relevant survey themes, the Survey Team further developed and refined questions through an iterative process. When available, the Team prioritized questions that had been tested and validated externally. The source and reference of the selected validated questions are reported herein, along with the results.

A preliminary online version of the questionnaire was qualitatively tested by the Survey Team, RDoC staff, and external volunteers prior to the official launch. The 70-question survey was professionally translated and enabled respondents the toggle between the two official languages during survey completion.

#### 1.3.2 Data Collection

Distribution of the survey invitation and link was coordinated independently by Provincial Housestaff Organizations (PHOs), including:

- Maritime Resident Doctors (MarDocs)
- Professional Association of Residents of Newfoundland and Labrador (PARNL)
- Resident Doctors of Saskatchewan (RDoS)
- Professional Association of Resident Physicians of Alberta (PARA)
- Professional Association of Residents and Interns of Manitoba (PARIM)
- Professional Association of Residents of Ontario (PARO)
- Resident Doctors of BC (RDBC)

In addition to the initial survey invitation, three survey reminders were sent to eligible respondents. The data collection period ran from April 3<sup>rd</sup> to May 29<sup>th</sup>, 2018.

#### 1.3.3 Survey Response Rate

833 residents completed the survey for an overall response rate of 8.3%. In total, 10,091 residents with active email accounts received the survey invitation. This total count is based on denominators provided by each PHO and consisted of the number of email addresses in the PHO membership mailing lists minus undeliverable survey invitations. To be considered a respondent, residents initiating the survey had two options:

- 1. Answer 'No' on the consent question, or;
- 2. Answer 'Yes' on the consent question and select their affiliated faculty of medicine.

### 1.3.4 Survey Weights

The data was weighted for survey non-response on gender, training faculty of medicine, and broad medical training specialty using 2017-18 PGME census data generously supplied by the Canadian Post M.D. Education Registry (<u>CAPER</u>).

To improve alignment between the CAPER administrative data (n=10,152) and the PHO mailing lists (n=10,091), adjustments were made to account for the inclusion and exclusion of visa trainees and fellows of each of the PHO memberships. A limitation to this approach is that CAPER acquires data on medical residents in the fall of the academic year, while the 2018 RDoC survey was conducted in April and May 2018. Thus, minor variations are expected between the two data sources due to factors such as transfers or program completion for instance.

Another limitation of survey weights is that, while the weighted responses reflect the proportion of the targeted survey population for the selected weighing variables fairly accurately, the distribution of other population characteristics, such as training year or age, may be skewed.

#### 1.3.5 Reading this Report

#### **Terminology**

When a reference is made to "respondents" this reflects unweighted results. Conversely, when a reference is made to "residents", this is in reference to findings that were weighted to reflect the population characteristics of the RDoC membership.

## **Subgroup Analyses**

Descriptive statistics based on a subset of residents are identified with an asterisk (\*) in the title of the chart or the top left title cell of the descriptive table. The corresponding inclusion criteria for the population subset is then provided below the table of results.

# 1.4 Respondent Characteristics

This section reports on the characteristics of the resident population surveyed, including;

- Demographic indicators
- Details about undergraduate medical (MD) education
- Current residency training circumstances

Males made up the majority of the 833 survey respondents at 60.8%. Most (63.3%) residents were aged 26 to 30 years. Residents had obtained their MD in Canada in 88.6% of cases. Nearly every resident was a Canadian citizen or permanent resident, 99.8%.

#### 1.4.1 Demographic Information

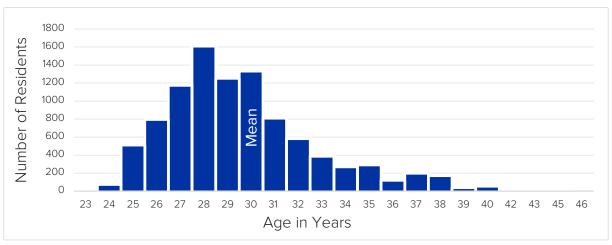
**Gender** N=821 - Unweighted

Gender	Count	Percent (%)
Male	499	60.8
Female	307	37.4
Prefer not to specify	15	1.8

## **Age Group** N=9,740 - Weighted

Age Group	Count	Percent (%)
25 years or Less	591	6.1
26 to 30 Years	6,165	63.3
31 to 35 Years	2,338	24
36 to 40 Years	584	6
Over 40 Years	62	0.6





## 1.4.2 Undergraduate Medical Education (UGME)

## Country in which MD Degree was Granted

N=10,150 - Weighted

Country in which MD Degree was Granted	Count	Percent (%)
Canada	8,990	88.6
United States	81	0.8
Other country	1,079	10.6

#### **Legal Status in Canada**

N=9,998 - Weighted

Legal Status in Canada	Count	Percent (%)
Canadian citizen or permanent resident	9,975	99.8
Visa holder	23	0.2

#### 1.4.3 Postgraduate Medical Education (PGME)

Survey respondents represented the 13 Canadian faculties of medicine supported by Residency Doctors of Canada. Collapsed into four broad medical categories, respondents were training in family medicine and related areas (23.7%), medicine (58.3%), laboratory medicine (2.4%), and surgery (15.6%).

The majority of residents (60.9%), were in their first two years of training. 6.2% of those were either in their final year of residency training or did not know/had not yet decided if this was their final year.

# **Faculty of Medicine of Training Program**

N=821 - Unweighted

PGME Faculty of Medicine	Count	Percent (%)
Memorial University of Newfoundland	57	6.8
Dalhousie University	36	4.3
University of Ottawa	71	8.5
Queens University	38	4.6
University of Toronto	144	17.3
McMaster University	98	11.8
Western University	41	4.9
Northern Ontario School of Medicine	20	2.4
University of Manitoba	61	7.3
University of Saskatchewan	64	7.7
University of Alberta	48	5.8
University of Calgary	27	3.2
University of British Columbia	128	15.4

# **Postgraduate Training Year**

N=10,152 - Weighted

Postgraduate Training Year	Count	Percent (%)
PGY-1	3,342	32.9
PGY-2	2,844	28.0
PGY-3	1,863	18.4
PGY-4	1,187	11.7
PGY-5	749	7.4
PGY-6	167	1.6

# **Final Residency Training Year Status**

N=10,125 - Weighted

Is the resident in their final year of residency training?	Count	Percent (%)
Yes	1,615	16.0
No	8,490	83.8
Don't know/Not yet decided	20	0.2

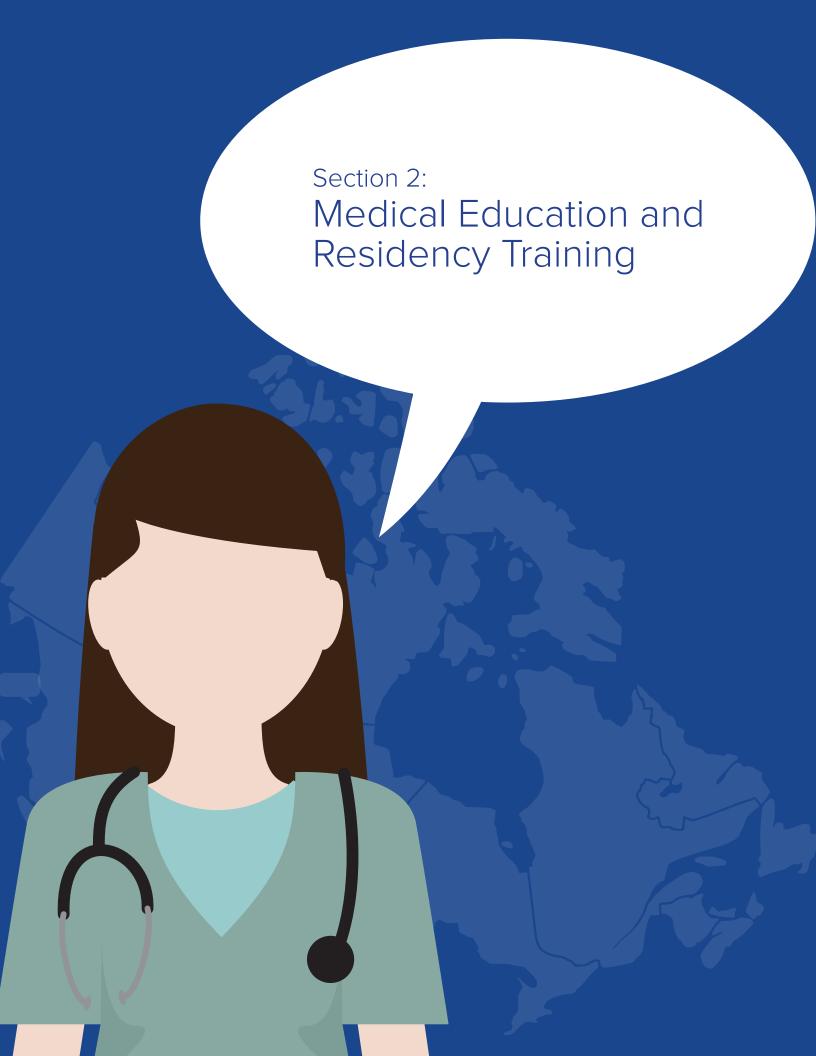
# Residency Training Specialty N=832 - Unweighted

Training Specialty	Count	Percent (%)
Total, Family Medicine and Enhanced Skills	197	23.7
Total, Laboratory Medicine (Pathology and Related Specialties, Medical Biochemistry, Medical Microbiology)	20	2.4
Medicine:		
Anesthesiology and Subspecialties	40	4.8
Dermatology	11	1.3
Diagnostic Radiology and Subspecialties, Nuclear Medicine	20	2.4
Emergency Medicine	48	5.8
• Internal Medicine and Subspecialties, Medical Genetics and Genomics	116	13.9
Neurology (including Pediatric Neurology)	17	2.0
Pediatrics and Subspecialties	68	8.2
Physical Medicine and Rehabilitation	19	2.3
Psychiatry and Subspecialties	119	14.3
Public Health and Preventive Medicine	18	2.2
Radiation Oncology	9	1.1
Total, Medicine	485	58.3
Surgery:		
Cardiac Surgery	2	0.2
General Surgery, Vascular Surgery	48	5.8
Neurosurgery	1	0.1
Obstetrics and Gynecology	28	3.4
Ophthalmology	11	1.3
Orthopedic Surgery	23	2.8
Otolaryngology – Head and Neck Surgery	7	0.8
Plastic Surgery	6	0.7
• Urology	4	0.5
Total, Surgery	130	15.6

# 1.5 General Conclusions

The 2018 RDoC National Resident Survey generated new data that provided valuable insights reflective of resident physician views and the challenges they face in key areas of their medical training.

The results of the 2018 RDoC National Resident Survey will be useful for the development of position papers, informative materials, and initiatives for advocacy with our stakeholders to further shape the landscape of medical education.



# 2.1 Selecting a Residency Training Program

This section reports on questions pertaining to the selection of a residency training program, including:

- Timing of CaRMS R-1 residency match decisions
- Exposure to Entry Route medical specialties

Few residents (9.2%) had identified their first-choice specialty for the CaRMS R-1 residency match before the start of their MD program: 22.3% of them made that choice in their first or second year, while 39.1% made that choice the same year they were to graduate with an MD degree.

In theory, Canadian medical schools are expected to provide their students with enough exposure to 30 specific specialties (or Entry Routes), including family medicine, to assist them in the career decision-making process. Findings from this survey challenge the feasibility of this approach, since only 3.3% of residents report exposure to twenty-six or more Entry Routes. The majority of residents (64%) report being exposed to fifteen or less Entry Routes during their MD degree.

Excluding mandatory rotations in family medicine, general surgery, internal medicine, pediatrics, obstetrics and gynecology, and psychiatry, six medical specialities were experienced by more than 50% of residents: emergency medicine, anesthesiology, orthopedic surgery, neurology, otolaryngology, and urology.

Timing of CaRMS R-1 Residency Match First Choice N=10,130 - Weighted

When did you decide which specialty would be your first choice in the CaRMS R-1 Residency Match?	Count	Percent (%)
Before the start of my MD program	931	9.2
First year of my MD program	882	8.7
Second year of my MD program	1,375	13.6
Third year of my three-year MD program	1,438	14.2
Third year of my four-year MD program	2,396	23.7
Fourth year of my MD program	2,526	24.9
Other	412	4.1
Don't know	170	1.7

<sup>1</sup> Association of Faculties of Medicine of Canada (Dec. 11, 2017). Mission Impossible. See https://afmc.ca/blog/2017-12-11

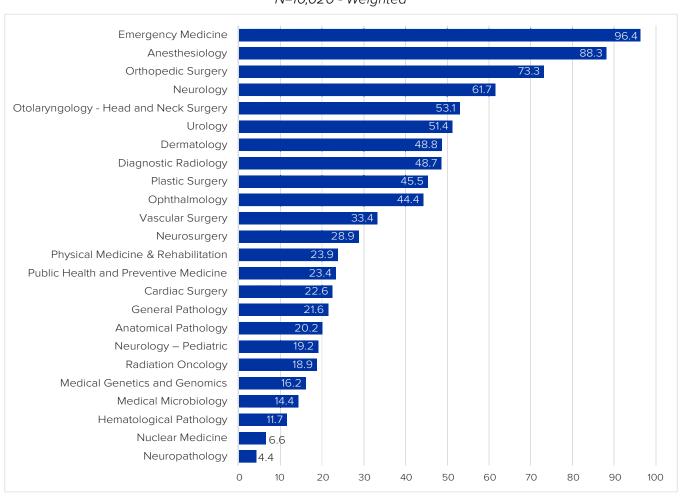
# Number of *Entry Route* Specialties Exposed to During Medical Degree\*

N=10,020 - Weighted

Number of Entry Route Specialties Exposed to During the Completion of the MD Degree	Count	Percent (%)
1 to 10	1258	12.6
11 to 15	5154	51.4
16 to 20	2478	24.7
21 to 25	798	8.0
26 to 30	332	3.3

<sup>\*</sup>To reduce respondent burden, the following specialties were excluded from the question and included in the counts under the assumption that they constitute core rotations at all Canadian faculties of medicine: family medicine, general surgery, internal medicine, pediatrics, obstetrics and gynecology, and psychiatry.

# Entry Routes: Percentage of Residents Exposed to Entry Route Specialties \* N=10,020 - Weighted



<sup>\*</sup>To reduce repondent burden, the following specialties were excluded from the question under the assumption that they constitute core rotations at all Canadian faculties of medicine: family medicine, general surgery, internal medicine, pediatrics, obstetrics and gynecology, and psychiatry.

# 2.2 Postgraduate Medical Training

This section reports on the residency training experience of survey respondents, as well as their career intentions. The themes include:

- Evaluations and assessments
- Generalism
- Medical assistance in dying (MAiD)
- Competency-based medical education (CBME)
- Transferring training program
- · Career choices

#### 2.2.1 Evaluations and Assessments

When asked to rate the level of observation received by their preceptors for their clinical work, the majority of residents (65.9%) reported that it was sufficient or just enough. Further probed on the quality of the feedback received from preceptors, 66.2% of residents rated the observations as sometimes helpful and 22.3% of them rated it as almost always helpful.

# **Sufficiency of Observation for Clinical Work**

N=8,764 - Weighted

Do you find the level of observation of your clinical work by preceptors to be sufficient?	Count	Percent (%)
More than sufficient: too much observation	497	5.7
Sufficient: just enough observation	5,773	65.9
Less than sufficient: would like to be observed more	2,179	24.9
Completely insufficient: I am never observed clinically	265	3.0
Not applicable	50	0.6

#### **Helpfulness of Feedback Received from Preceptors**

N=8,764 - Weighted

Do you find the feedback you receive to be helpful?	Count	Percent (%)
Yes, almost always	1,957	22.3
Sometimes	5,798	66.2
No, almost never	953	10.9
Not applicable	56	0.6

#### 2.2.2 Generalism

Generalism is defined as "a philosophy of care that is distinguished by a commitment to the breadth of practice within each discipline and collaboration with the larger health care team in order to respond to

patient and community needs."<sup>2</sup> When asked if generalism is promoted in their training program, a large majority of residents (74.4%) somewhat or strongly agreed. When asked to consider the importance of generalism, 82.4% of residents gave a score of 7 or more on the importance of generalism on a scale of 1 to 10, where 10 means 'Very important'.

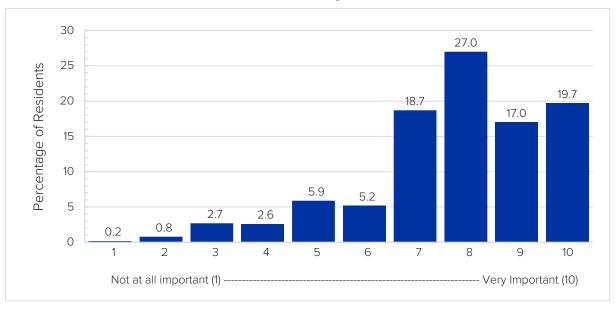
The residents' intentions to integrate generalism as part of their future medical practice was high (>68%) for each of the four scenarios presented: seeing undifferentiated/undiagnosed patients, treating persons from a large range of ages, managing more than one set of diseases, and involving more than one organ system.

# Promotion of Generalism N=9,016 - Weighted

Generalism is promoted in my program:	Count	Percent (%)
Strongly agree	3,216	35.7
Somewhat agree	3,486	38.7
Neither agree nor disagree	994	11.0
Disagree	732	8.1
Strongly disagree	390	4.3
Don't know	186	2.1
N/A	12	0.1

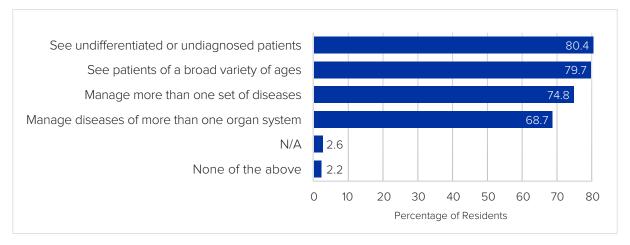
# Importance of Generalism for Residents

N=8,969 - Weighted



<sup>2</sup> Definition proposed in the Royal College of Physicians and Surgeons of Canada Report of the Generalism and Generalist Task Force, July 2013.

## Residents' Intentions to Implement Generalism in Their Future Practice N=9,097 - Weighted



**Interpretation example**: 68.7% of residents intend to implement generalism in their future practice by managing diseases of more than one organ system.

#### 2.2.3 Medical Assistance in Dying (MAiD)

In accordance with federal legislation, medical assistance in dying (MAiD) includes circumstances in which a medical practitioner or nurse practitioner, at an individual's request:

- a) administers a substance that causes an individual's death; or
- b) prescribes a substance for an individual to self-administer to cause their own death.

The survey findings show that 50.2% of residents were offered an educational or informational session on MAiD and in 59.2% of cases, this training was tailored specifically for a resident physician audience, e.g. academic half-day. When asked about observing or being involved in MAiD discussions or processes, 44.8% of residents whose specialty/institution/preceptors partake in MAiD, had encountered MAiD discussions or processes with patients. For 16.1% of residents, their specialty/institution/preceptors did not partake in MAiD.

# Exposure to Educational or Informational Session on MAiD N=8,972 - Weighted

Were Residents Offered an Educational or Informational Session on MAiD	Count	Percent (%)
Yes	4,500	50.2
No	4,222	47.1
Don't know	250	2.8

#### Audience of the Educational or Informational Session on MAiD

N=4,500 - Weighted

Was the educational or informational session on MAiD offered specifically at a resident physician audience (e.g. academic half-day)?*	Count	Percent (%)
Yes	2,662	59.2
No	1,670	37.1
Don't know	168	3.7

<sup>\*</sup>Condition: Question limited to the 50.2% of residents who had been offered an educational or informational session on MAiD.

# Observation or Involvement in MAiD Discussions or Processes

N=8,972 - Weighted

Resident observed or was involved in discussions or processes related to MAiD	Count	Percent (%)
Yes, I've encountered MAiD discussions or processes with patients	4,023	44.8
No, because we have not yet had a case of a patient inquiring about or receiving MAiD	3,145	35.1
Not applicable, my specialty/institution/preceptors do not partake in MAID	1,447	16.1
Other	202	2.3
Don't know	155	1.7

# 2.2.4 Competency-Based Medical Education (CBME)

Competency-based medical education (CBME) is an approach to preparing physicians for practice that is fundamentally oriented to graduate outcome abilities and organized around competencies derived from an analysis of societal and patient needs. It deemphasizes time-based training and promises greater accountability; flexibility, and learner centeredness<sup>3</sup>.

CBME is being introduced to all postgraduate medical training programs in a staggered fashion through the Royal College's Competence by Design (CBD) initiative and the College of Family Physicians' Triple C initiative. Some residency programs are already partaking in CBME, while other programs will introduce the model in years to come.

Triple C is a competency-based curriculum for family medicine residency training based on the CanMEDS-FM framework and the Evaluation Objectives in Family Medicine<sup>4</sup>. The three Cs are in reference to the following components:

- · Comprehensive education and patient care
- · Continuity of education and patient care
- Centred in family medicine

CBME includes CBD and Triple C

<sup>3</sup> The definition of CBME endorsed by the RCPSC is the following: Frank, J.R., Mungroo, R., Ahmad, Y., Wang, M., De Rossi, S., & Horsley, T. Toward a definition of competency-based education in medicine: a systematic review of published definitions. Medical Teacher 2010; 32(8):631-637. White paper

<sup>4</sup> To learn more on Triple C, visit the CFPC website.

Slightly over 30% of residents reported that CBME had been rolled out in their programs, 17.0% of which were formally participating in this new training model. For residents who confirmed the rollout in their program, irrespective of their own participation, 64.4% stated being adequately informed about CBME. When the same group was asked if they felt that their preceptors were adequately informed about CBME, only 36.5% answered in the affirmative and 20.1% did not know. When asked if they felt the infrastructure in their program to support the transition to CBME is adequate, 46.0% agreed and 25.9% did not know. Residents who had seen a CBME rollout in their program generally agreed, 84.6%, that CBME was advocated for and supported within their program, and that their program welcomed feedback from residents on CBME, 69.9%.

When all respondents were asked about the greatest benefit of CBME, the most frequent answer was "don't know", at 22.5%. While low, this figure may reflect the relatively low level of direct experience of CBME by residents due to the limited roll-out of CBME program as a whole at the time of the survey. The two most frequent responses about the greatest benefits of CBME were that it improves the quality of the feedback, 18.6%, and that it formalizes and standardizes learning objectives, 17.0%. In contrast, evaluation fatigue (31.9%), and time burden (24.2%), were identified as the greatest challenges of CBME for residents. When asked about the greatest challenges of CBME for preceptors, the above two challenges also had the top frequencies but in reverse order: time burden at 37.5% and evaluation fatigue at 33.9%.

# CBME Implementation Status in Training Program N=9,628 - Weighted

For the 2017-2018 academic year, my program had:	Count	Percent (%)
Rolled out CBME and I am formally participating	1,640	17.0
Rolled out CBME, but I am not formally participating	1,267	13.2
Not yet rolled out CBME	5,882	61.1
Don't know	839	8.7

# Adequacy of Resident's Knowledge of CBME

N=2,907 - Weighted

Do you feel adequately informed on CBME?*	Count	Percent (%)
Yes	1,871	64.4
No	721	24.8
Don't know	315	10.8

\*Condition: Respondents were in a program in which:

- $\bullet$  CBME was rolled out and they were formally participating in the 2017-2018 academic year
- CBME was rolled out but they were not formally participating in the 2017-2018 academic year

# Adequacy of Preceptors' Knowledge of CBME

N=2,895 - Weighted

Do you feel that your preceptors are adequately informed on CBME?*	Count	Percent (%)
Yes	1,058	36.5
No	1,256	43.4
Don't know	581	20.1

\*Condition: Respondents were in a program in which:

- CBME was rolled out and they were formally participating in the 2017-2018 academic year
- CBME was rolled out but they were not formally participating in the 2017-2018 academic year

## Adequacy of Infrastructure to Support the Transition to CBME

*N*=2,895 - *Weighted* 

Is appropriate infrastructure in place to support the transition to CBME in your program?*	Count	Percent (%)
Yes	1,332	46.0
No	814	28.1
Don't know	749	25.9

\*Condition: Respondents were in a program in which:

- CBME was rolled out and they were formally participating in the 2017-2018 academic year
- $\bullet$  CBME was rolled out but they were not formally participating in the 2017-2018 academic year

#### **Greatest Benefits of CBME for Residents**

N=9,630 - Weighted

What are the greatest benefit of CBME for residents?	Count	Percent (%)
Don't know	2,168	22.5
Improves the quality of the feedback	1,788	18.6
Formalizes and standardizes learning objectives	1,634	17.0
Improves the frequency or timeliness of feedback	1,280	13.3
Allows the learner to focus on challenging competencies as opposed to those previously acquired	1,222	12.7
Simulates a 'transition to practice' experience	785	8.2
Improves access to training opportunities	185	1.9
Facilitates mentorship	178	1.8
Other benefit	390	4.0

# **Greatest Challenges of CBME for Residents**

N=9,630 - Weighted

What are the greatest challenges of CBME for residents?	Count	Percent (%)
Evaluation fatigue	3,069	31.9
Time burden	2,331	24.2
Uncertain training timelines, given potentially variable lengths of time required for different residents to achieve competencies	1,023	10.6
Don't know	829	8.6
Poor preceptor attitude towards CBME	645	6.7
Inadequate clarity on resident roles/responsibilities	631	6.6
Lack of quality feedback	509	5.3
Inadequate program support for residents experiencing challenges with CBME	141	1.5
Unsupportive clinic/hospital infrastructure	83	0.9
Other	369	3.8

## **Greatest Challenges of CBME for Preceptors**

N=9,428 - Weighted

What are the greatest challenges of CBME for preceptors?*	Count	Percent (%)
Time burden	3,128	37.5
Evaluation fatigue	2,831	33.9
Lack of training on how to evaluate residents in a CBME manner	849	10.2
Inadequate clarity on preceptor roles/responsibilities	574	6.9
Providing quality feedback	418	5.0
Real or perceived pressure to 'pass' residents, perhaps undeservedly	317	3.8
Unsupportive clinic/hospital infrastructure	101	1.2
Other	127	1.5

<sup>\*</sup>Condition: Results exclude the 1,083 residents who reported never having served as a preceptor.

## **Advocacy and Support for CBME**

N=2,876 - Weighted

Do you feel that CBME is advocated for and supported within your program?*	Count	Percent (%)
Yes	2,434	84.6
No	151	5.3
Don't know	291	10.1

\*Condition: Respondents were in a program in which:

- $\bullet$  CBME was rolled out and they were formally participating in the 2017-2018 academic year
- CBME was rolled out but they were not formally participating in the 2017-2018 academic year

#### Feedback from Residents on CBME

N=2,876 - Weighted

Does your program welcome feedback from residents on CBME (e.g. logistics, issues)?*	Count	Percent (%)
Yes	2,011	69.9
No	285	9.9
Don't know	580	20.2

\*Condition: Respondents were in a program in which:

- CBME was rolled out and they were formally participating in the 2017-2018 academic year
- CBME was rolled out but they were not formally participating in the 2017-2018 academic year

#### 2.2.5 Transferring Training Program

Survey findings show that over a third of residents have considered transferring to another training program. Of those, close to one in ten (9.6%) completed a transfer (about 3.3% of the total resident population). Those residents were asked to identify the reasons that motivated their program transfers and the most frequently reported reason, in 70.4% of cases, was experiencing a change in career goals or specialty interest. The second most frequently cited reason for transferring, at 32.4%, was experiencing intimidation or harassment. Similarly, 23.7% of residents who transferred cited the attending physicians in their original program as a reason for their program change. Family and/or social reasons was a factor cited in 26.8% of training program transfers.

Residents who considered a training program transfer but did not make the move were able to identify a single reason for not transferring. The most frequently cited reasons were preferring their original program (44.3%), and the complexity of the transfer process (20.1%).

#### **Considering a Change in Training Program**

N=8,826 - Weighted

Have you ever considered transferring to another speciality?	Count	Percent (%)
Yes	3,004	34.0
No	5,822	66.0

#### **Deciding to Change Training Program**

N=2.994 - Weighted

Did you transfer to another speciality?*	Count	Percent (%)
Yes	287	9.6
No	2,707	90.4

<sup>\*</sup>Condition: Question limited to residents, 34.0%, who considered transferring to another training program.

# **Reason for Transferring to Another Training Program**

N=287 - Weighted

Why did you transfer?* Respondents could select every reason that applied.	Count	Percent (%)
Change in career goals or specialty interest	202	70.4
Intimidation or harassment	93	32.4
Family and/or social reasons	77	26.8
Attending physicians in original program	68	23.7
Original program would not let me meet career goals	35	12.2
Original program was not first choice in CaRMS	32	11.1
Peer group in original program	19	6.6

<sup>\*</sup>Condition: Question limited to residents, 3.3%, who transferred to another training program.

## **Reason for Not Transferring to Another Training Program**

N=2,707 - Weighted

Why did you not transfer? Respondents could only select a single reason.	Count	Percent (%)
Preferred original program	1,198	44.3
Complexity of the process	543	20.1
It would lengthen residency	216	8.0
The program I wished to transfer to would not accept me	195	7.2
Stigma/Fear of reprisal	178	6.6
Was not allowed to transfer	15	0.6
Time involved in transferring	13	0.5
Advised not to	8	0.3
Other	341	12.6

<sup>\*</sup>Condition: Question limited to residents, 34.0%, who considered transferring to another speciality but did not complete the transfer.

## 2.2.6 Looking Back on Career Choices

Respondents were asked to evaluate their career choices in medicine. Most residents, 88.3%, would reapply to the same specialty in which they are currently training. When asked whether, if they could revisit their choice of profession, they would choose to become a physician again nearly two thirds of residents (62.1%) said that they would be likely or very likely to pursue medicine again.

# **Current Attitude Towards Reapplying to the Same Training Specialty**

N=8,738 - Weighted

Would you reapply to the same specialty in which you are currently training?	Count	Percent (%)
Yes	7,718	88.3
No	1,020	11.7

# **Current Attitude Towards Choosing to Become a Physician**

N=8,824 - Weighted

If given the opportunity to revisit your career choice, would you choose to become a physician again?	Count	Percent (%)
Very likely	3,036	34.4
Likely	2,441	27.7
Somewhat likely	1,827	20.7
Unlikely	1,044	11.8
Very unlikely	476	5.4



This section reports on the themes surrounding the overall wellness of survey respondents, including:

- Work/life balance
- Duty and sleep hours
- Emotional exhaustion and resiliency
- Intimidation, harassment and resources
- Mental health
- Suicidality
- Alcohol and substance use

### 3.1 Work/Life Balance

The survey results reflect the challenges residents face to maintain their own wellness. When asked to evaluate if their work schedule leaves them enough time for their personal and/or family life, more residents disagreed than agreed with the question statement. 47.0% would be categorized as negative for work-life balance, versus 34.2% as positive for work-life balance.

# Self-Assessment of Work/Life Balance<sup>5</sup>

N=8,778 - Weighted

My work schedule leaves me enough time for my personal/family life.	Count	Percent (%)
Strongly agree	469	5.3
Somewhat agree	2,533	28.9
Neither agree nor disagree	1,650	18.8
Disagree	2,658	30.3
Strongly disagree	1,468	16.7

# 3.2 Duty Hours and Sleep

71.6% of residents are in training programs where they work 60 or more hours per week, with close to one in five (18.6%) working 80 or more hours a week. The largest group of residents, 34.0%, reported working on average between 60 and 69 hours per week in their residency program. These numbers are consistent with the 2012, 2013, and 2015 RDoC survey results whereby residents worked on average 62.3, 63.7, and 60.3 hours per week, respectively. Close to one in five (18.6%) residents worked 80 or more hours per week.

When not on call, the largest group of residents, 42.5%, slept six to less than seven hours per night. Most residents, 80.3%, sleep six or more hours per night when not on call. **These numbers are also consistent with the 2012, 2013, and 2015 RDoC survey results, where residents slept on average 6.9, 6.8 and 6.9 hours per week when not on call, respectively.** 

<sup>5</sup> Question from Williamson, K. et al. (2017). Global Assessment of Resident Wellness: Comparing the Maslach Burnout Inventory with Additional Validated Wellness Instruments. Annals of Emergency Medicine, Volume 70, Issue 4, S36 - S37. DOI: http://dx.doi.org/10.1016/j.annemergmed.2017.07.114

Less than a third of residents, 28.2%, had no trouble at all falling or staying asleep, or sleeping too much in the two weeks preceding the survey. The remainder, 71.8%, would screen positive for sleep disturbance. More than a third of residents, 33.8%, stated having sleep-related difficulties more than half the days or nearly every day in the past two weeks.

When asked if they had experienced work-related fatigue that had led to medical errors that <u>did not</u> reach the patient, 63.1% of residents answered yes. When asked if they had experienced work-related fatigue medical errors <u>that</u> <u>impacted</u> the patient, nearly one in five residents answered yes.

## Average Number of Hours Worked Per Week in Residency Program N=8,758 - Weighted

What is the average number of hours worked per week in your residency program?	Count	Percent (%)
Less than 50 hours per week	446	5.1
50 - 59 hours per week	2,036	23.2
60 - 69 hours per week	2,977	34.0
70 - 79 hours per week	1,668	19.0
80 or more hours per week	1,631	18.6

# Average Number of Hours of Sleep, When Not on Call

N=8,778 - Weighted

What is the average number of hours that you sleep per night, when not on call in your residency program?	Count	Percent (%)
Less than 4 hours per night	21	0.2
4 to less than 5 hours per night	275	3.1
5 to less than 6 hours per night	1,433	16.3
6 to less than 7 hours per night	3,730	42.5
7 to less than 8 hours per night	2,886	32.9
8 or more hours per night	433	4.9

## Incidence of Sleep-Related Difficulties<sup>6</sup>

N=8,778 - Weighted

Over the last 2 weeks, how often have you had trouble falling or staying asleep, or sleeping too much?	Count	Percent (%)
Not at all	2,475	28.2
Several days	3,340	38.0
Nearly every day	1,360	15.5
More than half the days	1,603	18.3

<sup>6</sup> Question from MacGregor KL, Funderburk JS, Pigeon W, Maisto SA. Evaluation of the PHQ-9 Item 3 as a Screen for Sleep Disturbance in Primary Care. Journal of General Internal Medicine. 2012;27(3):339-344. DOI: 10.1007/s11606-011-1884-5

## **Fatigue-Related Medical Errors That Did Not Affect Patients**

N=8,766 - Weighted

Please indicate whether work-related fatigue has led to medical errors that did NOT reach the patient.	Count	Percent (%)
Yes	5,531	63.1
No	3,235	36.9

#### **Fatigue-Related Medical Errors That Affected Patients**

N=8,770 - Weighted

Please indicate whether work-related fatigue has led to one or more medical errors that reached the patient.	Count	Percent (%)
Yes	1,725	19.7
No	7,045	80.3

# 3.3 Emotional Exhaustion and Resiliency

When asked to evaluate their resiliency over the previous month using an abbreviated version of the Connor-Davidson Resiliency Scale, the majority of residents, (87.6%) reported that they were often or nearly always able to adapt when changes occurred. Most, (86.5%) were also often or nearly always able to bounce back after an illness, injury, or other hardship.

Despite having this protective quality, the majority of residents, 51.9%, self-screened as positive for burnout.

Residents are not likely to take sick days. In the 12 months preceding the survey, two thirds of them often usually or always went into work despite feeling ill or unhealthy.

#### Self-Rated Level of Burnout<sup>7</sup>

N=8,725 - Weighted

Overall, based on your own definition of burnout, how would you rate your level of burnout?	Count	Percent (%)
I enjoy my work. I have no symptoms of burnout.	444	5.1
Occasionally I am under stress, and I don't always have as much energy as I once did, but I don't feel burned out.	3,754	43.0
I am definitely burning out <sup>†</sup> and have one or more symptoms of burnout, such as physical and emotional exhaustion. <sup>†</sup>	3,219	36.9
The symptoms of burnout that I'm experiencing won't go away. I think about frustration at work a lot. †	916	10.5
I feel completely burned out and often wonder if I can go on. I am at the point where I may need some changes or may need to seek some sort of help. †	392	4.5

<sup>†</sup> if selected, counts as a positive burnout screen.

<sup>7</sup> Question from Rohland BM, Kruse GR, Rohrer JE. Validation of a single-item measure of burnout against the Maslach Burnout Inventory among physicians. Stress and Health. 2004; 20:75–79. DOI: https://doi.org/10.1002/smi.1002

## Ability to Adapt to Change, Part 18

N=8,711 - Weighted

How much you agree with the following statements over the last month? I am able to adapt when changes occur.	Count	Percent (%)
True nearly all of the time	3,296	37.8
Often true	4,334	49.8
Sometimes true	999	11.5
Rarely true	82	0.9
Not true at all	0	0.0

## Ability to Adapt to Change, Part 2

N=8,711 - Weighted

How much you agree with the following statements over the last month? I tend to bounce back after illness, injury, or other hardships.	Count	Percent (%)
True nearly all of the time	4,081	46.8
Often true	3,459	39.7
Sometimes true	1,090	12.5
Rarely true	54	0.6
Not true at all	27	0.3

# Working Despite Feeling III or Unhealthy9

N=8,711 - Weighted

In the past 12 months, did you go into work despite feeling ill or unhealthy?	Count	Percent (%)
I always went to work despite feeling ill or unhealthy	2,587	29.7
I usually went to work despite feeling ill or unhealthy	2,278	26.2
I often went to work despite feeling ill or unhealthy	935	10.7
I sometimes went to work despite feeling ill or unhealthy	2,107	24.2
I never went to work when feeling ill or unhealthy	377	4.3
I was not ill or unhealthy during the last 12 months	427	4.9

# 3.4 Intimidation, Harassment and Support Resources

More than three quarters of residents (78.2%) experienced at least one form of harassment or intimidation during the year preceding the survey. The most common form of harassment or intimidation experienced was verbal comments, reported by 94.6% of residents. Other types identified included "work as punishment"

<sup>8</sup> Part 1 & 2 questions from the Connor Davidson-Resilience Inventory Scale-2, a 2-item version of the longer CD-RISC. Validated by: Vaishnavi S, Connor K, Davidson JRT. An abbreviated version of the Connor-Davidson Resilience Scale (CD-RISC), the CD-RISC2: Psychometric properties and applications in psychopharmacological trials. Psychiatry research. 2007;152(2-3):293-297. DOI: 10.1016/j.psychres.2007.01.006

<sup>9</sup> Question based on Johns G. Presenteeism in the workplace: A review and research agenda. J. Organ. Behav. 2010; 31: 519–542. DOI: 10.1002/job.630

(20.5%), "privileges/opportunities taken away" (17.1%), "sexual harassment" (11.2%), "inappropriate or unwanted physical contact" (11.2%), "recrimination for reporting" (7.8%) or "other" (11%).

Patients were cited as the most common source of intimidation and harassment, with 77.1% of residents reporting an experience in the preceding 12 months. In comparison, 59.5% had at least one experience with a staff physician (51.9%) or program director (7.6%), 55.3% had an experience with an allied health professional, and 54.9% had an experience with a fellow resident, either in another program (35.7%) or in their own (19.2%).

Experiences of harassment or intimidation during the reference period were more frequent for men, 85.5%, than women, 71.4%. Reported harassment or intimidation also varied by broad medical specialty, with the lowest rate seen in family medicine trainees, 69.5%, and the highest rate seen in the surgical resident group, 85.7%.

The basis of the harassment or intimidation reported by residents was highly varied. While gender was frequently cited at 38.4%, "other" bases of harassment or intimidation described by respondents made up the majority (53.3%) of the answers. These excluded categories such as ethnicity, culture, and language and often focused on professional characteristics of the resident, such as rank or specialty, or characteristics of the patient, including diagnosis/sequela or disagreement about treatment course for instance.

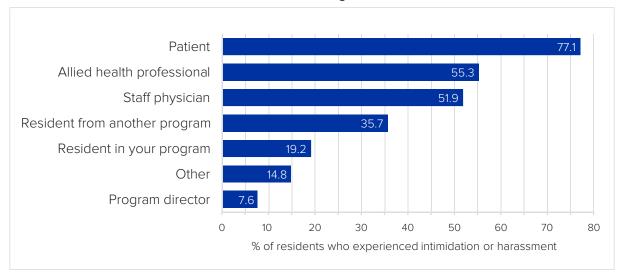
When asked if their program, medical school, or university has a policy to address intimidation and harassment, one fifth of respondents did not know the answer. Of those who knew about such policies and who had experienced a form of harassment, 10.4% had used that institutions' resources to these events. When the latter were asked if they felt that resources to address intimidation and harassment were adequate in their program, medical school or university, the majority, 61.2%, said no.

# Experiencing Harassment or Intimidation During the Previous 12 Months N=8,670 - Weighted

Did the Resident Experience Harassment or Intimidation during the Previous 12 Months	Count	Percent (%)
Yes	6,783	78.2
No	1,887	21.8

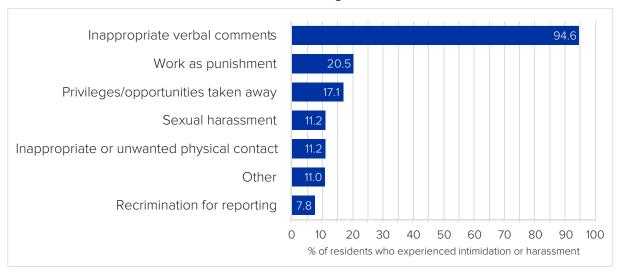
### Source of Harassment or Intimidation During the Previous 12 Months

N=6,783 - Weighted



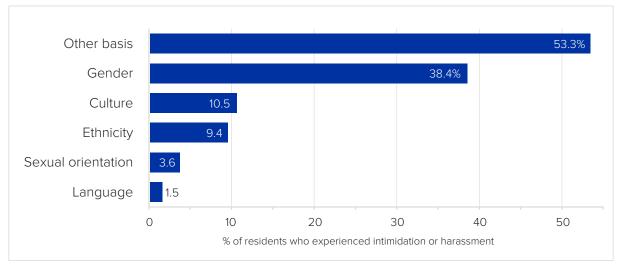
\*Condition: Question limited to residents, 77.1%, who experienced harassment or intimidation in the 12 months preceding the survey. Interpretation example: Of all the residents who experienced harassment or intimidation at least once in the 12 months preceding the survey, 77.1% reported been harassed or intimidated by a patient.

Forms of Harassment or Intimidation Experienced by Respondents Previous 12 Months\* N=6,783 - Weighted



<sup>\*</sup>Condition: Question limited to residents, 77.1%, who experienced harassment or intimidation in the 12 months preceding the survey.

### Basis of Harassment or Intimidation Experienced in Previous 12 Months\* N=6,783 - Weighted



\*Condition: Question limited to residents, 77.1%, who experienced harassment or intimidation in the 12 months preceding the survey.

Other reported bases for intimidation or harassment included, but were not limited to: the resident's age, medical specialty (family medicine residents particularly targeted), rank as resident or junior status in contrast to attending staff, stressful context, staff exhaustion, culture in medicine, hierarchy within staff, workplace conflicts, or patient characteristics such as (mental) illness, dissatisfaction with treatment plan, etc.

**Experiencing Harassment or Intimidation by Gender Previous 12 Months** *N=8,670 - Weighted* 

Experience of Harassment or Intimidation, Previous 12 Months (%)	Men	Women
Yes	85,5	71.4
No	14.5	28.6

## Experiencing Harassment or Intimidation by Broad Medical Specialty Previous 12 Months N=8,670 - Weighted

	Family Medicine	Medicine	Laboratory Medicine	Surgery
Percentage of residents who experienced harassment or intimidation in the previous 12 months	69.5	79.4	84.9	85.7

### Availability of Policy to Address Intimidation and Harassment

N=8,670 - Weighted

Does your program, medical school or university have a policy to address intimidation and harassment?	Count	Percent (%)
Yes	6,727	77.6
No	207	2.4
Don't know	1,736	20.0

### Use of Institutional Resources to Address Intimidation and Harassment

N=5,083 - Weighted

Have you used your program, medical school or university's resources to address intimidation and/or harassment?*	Count	Percent (%)
Yes	531	10.4
No	4,552	89.6

<sup>\*</sup>Condition: Question limited to residents who experienced harassment or intimidation in the 12 months preceding the survey and who were also aware of their program, medical school or university's policy to address intimidation and harassment.

#### Adequacy of Institutional Policy to Address Intimidation and Harassment N=531 - Weighted

Do you feel that your program, medical school or university's resources to address intimidation and harassment are adequate?*	Count	Percent (%)
Yes	201	37.9
No	330	62.1

<sup>\*</sup>Condition: Question limited to residents who experienced harassment or intimidation in the 12 months preceding the survey and who also used their program, medical school or university's resources to address intimidation and harassment.

#### 3.5 Mental Health

#### 3.5.1 Depression

The survey included two questions to assess symptoms of depression. Respondents were asked how often they had been bothered by having; 1) little interest or pleasure in doing things, and 2) feeling down, depressed, or hopeless during the two weeks preceding the survey. They reported being bothered more than half the days or nearly every day of the two-week reference period in 13.7% of the cases for the former statement and in 10.8% of the cases for the latter statement, respectively.

Looking at the same depression assessment questions by broad medical specialty, laboratory medicine residents had a noticeably higher frequency of depression symptoms than other specialty groups.

Lack of control over one's own schedule was cited as the most significant barrier to seeking mental health care (59.4%). The second most frequently reported barrier to care was the existing culture in medicine, 24.9%: a culture that might attach stigma to mental health, for instance.

### Arrol et al. Depression Screening<sup>10</sup>

N=8,662 - Weighted

Over the past 2 weeks, how often have you been bothered by any of the following problems: Feeling down, depressed, or hopeless.	Count	Percent (%)
Screened Negative for Depression	7,384	85.2
Screened Positive for Depression	1,278	14.8

# **Depression Screening Question 1: Interest and Pleasure in Doing Things**<sup>10</sup> N=8,676 - Weighted

Over the past 2 weeks, how often have you been bothered by any of the following problems: Little interest or pleasure in doing things.	Count	Percent (%)
Not at all	4,631	53.4
Several days	2,862	33.0
More than half the days	890	10.3
Nearly every day	293	3.4

# Depression Screening Question 2: Feeling down, Depressed, or Hopeless<sup>10</sup> N=8,662 - Weighted

Over the past 2 weeks, how often have you been bothered by any of the following problems: Feeling down, depressed, or hopeless.	Count	Percent (%)
Not at all	4,674	54.0
Several days	3,052	35.2
More than half the days	617	7.1
Nearly every day	319	3.7

# **Depression Screening Question 1 by Broad Medical Specialty** *N=8,676 - Weighted*

Over the past 2 weeks, how often have you been bothered by any of the following problems: Little interest or pleasure in doing things.	Family Medicine	Medicine	Laboratory Medicine	Surgery
Not at all	56.3	55.0	16.7	47.0
Several days	27.6	34.3	56.8	33.7
More than half the days	15.7	6.7	22.0	14.1
Nearly every day	0.6	3.9	4.6	5.3

<sup>10</sup> Questions from Arroll B, Goodyear-Smith F, Crengle S, et al. *Validation of PHQ-2 and PHQ-9 to Screen for Major Depression in the Primary Care Population. Annals of Family Medicine. 2010; 8(4): 348-353. DOI: 10.1370/afm.1139* 

#### **Depression Screening Question 2 by Broad Medical Specialty**

N=8,584 - Weighted

Over the past 2 weeks, how often have you been bothered by any of the following problems: Feeling down, depressed, or hopeless.	Family Medicine	Medicine	Laboratory Medicine	Surgery
Not at all	60.0	55.8	37.1	40.7
Several days	29.6	34.8	56.1	42.8
More than half the days	7.6	6.1	5.3	10.1
Nearly every day	2.7	3.3	1.5	6.5

#### **Barriers to Mental Health Care**

N=8,607 - Weighted

Which of the following is the most significant barriers to seeking mental health care?	Count	Percent (%)
Lack of control over your own schedule	5,113	59.4
Culture of medicine, e.g. stigma, perception that seeking mental health reflects weakness	2,141	24.9
Unavailability of resources that ensure confidentiality when deciding whether to seek support	604	7.0
Lack of wellness champions in senior roles	191	2.2
Lack of knowledge about available resources	59	0.7
Other	499	5.8

#### 3.5.2 Suicide

Beyond questions assessing depression symptoms, survey participants were asked if they had thought about suicide in the year preceding the survey. More than one in seven residents, 15.9%, had thought about suicide. Thoughts about suicide were more frequent in men than in women (18.0% versus 14.0%, respectively). Stratifying respondents by broad medical speciality, family medicine trainees had the lowest rate of thoughts about suicide, at 12.8%. The highest rate was reported by trainees in laboratory medicine, at 30.0%.

Probing further, those who reported thoughts about suicide were asked if they had seriously considered suicide in the last year: 15.9% of that subgroup answered yes. In all, this equates to approximately 2.5% of the resident population.

The rate of serious consideration of suicide was 2.4 times greater in men than in women. The rate for trainees in laboratory medicine was 3.1, 3.3 and 4.6 times higher than for trainees in family medicine, medicine, and surgical specialties, respectively.

#### Prevalence of Suicide Ideation<sup>11</sup> Previous 12 Months

N=8,676 - Weighted

In the past 12 months, have you had thoughts about suicide?	Count	Percent (%)
Yes	1,380	15.9
No	7,296	84.1

### Prevalence of Suicide Ideation by Gender Previous 12 Months

N=8,676 - Weighted

	Men	Women
% of residents who experienced thoughts about suicide	18.0	14.0

### Prevalence of Suicide Ideation by Broad Medical Specialty Previous 12 Months

N=8,584 - Weighted

	Family Medicine	Medicine	Laboratory Medicine	Surgery
% of residents who experienced thoughts about suicide	12.8	15.2	30.0	21.4

### **Prevalence of Serious Consideration of Suicide Previous 12 Months**

N=1,380 - Weighted

In the past 12 months, did you ever seriously consider attempting suicide or taking your own life?*	Count	Percent (%)
Yes	219	15.9
No	1,161	84.1

<sup>\*</sup>Condition: Question limited to residents, 15.9%, who had thoughts about suicide in the previous 12 months.

# Prevalence of Serious Consideration of Suicide by Gender Previous 12 Months N=1,380 - Weighted

	Men	Women
% of residents who seriously consider attempting suicide or taking your own life in the previous 12 months.*	21.5	9.0

<sup>\*</sup>Condition: Question limited to residents, 15.9%, who had thoughts about suicide in the previous 12 months.

<sup>11</sup> Question from Statistics Canada, EQ - PILOT - Canadian Health Survey on Children and Youth, Youth version. http://www23.statcan.gc.ca/imdb/p3Instr.pl?Function=assembleInstr&lang=en&Item\_Id=314505#qb317367

## Prevalence of Serious Consideration of Suicide by Broad Medical Specialty Previous 12 Months

N=1,380 - Weighted

	Family Medicine (%)	Medicine	Laboratory Medicine	Surgery
% of residents who seriously consider attempting suicide or taking your own life in the previous 12 months.*	16.8	15.7	51.3	11.2

<sup>\*</sup>Condition: Question limited to residents, 15.9%, who had thoughts about suicide in the previous 12 months.

### 3.6 Alcohol and Drug Use

In order to establish baseline data on this issue, survey participants were asked about their personal use of drugs and alcohol. Nearly 15% of residents had not consumed drugs or alcohol in the year preceding the survey. Of those who did, 16.1% reported experiencing at least one time where they felt that their use had a harmful effect on their physical health. A relatively smaller group of residents, 2.3%, reported experiencing at least one time where they felt that their drug or alcohol use had a harmful effect on their work performance or employment opportunities.

### Harmful Effect of Drug or Alcohol Use on Physical Health<sup>12</sup> Previous 12 Months

N=7,410 - Weighted

During the past 12 months, was there ever a time that you felt your drug or alcohol use had a harmful effect on your physical health?*	Count	Percent (%)
Yes	1,190	16.1
No	6,220	83.9

<sup>\*</sup>Condition: Excludes 1,248 residents, 14.5% of the total, who did not consume drugs or alcohol in the previous 12 months.

## Harmful Effect of Drug or Alcohol Use on Work Performance or Employment Opportunities Previous 12 Months

N=7,410 - Weighted

During the past 12 months, was there ever a time that you felt your drug or alcohol use had a harmful effect on your work performance or employment opportunities?*	Count	Percent (%)
Yes	171	2.3
No	7,239	97.7

<sup>\*</sup>Condition: Excludes 1,248 residents, 14.5% of the total, who did not consume drugs or alcohol in the previous 12 months.

<sup>12</sup> Question from Statistics Canada, 2015 Canadian Tobacco, Alcohol and Drugs Survey. http://www23.statcan.gc.ca/imdb/p3lnstr.pl?Function=assembleInstr&a=1&&lang=en&ltem\_Id=299300



This section reports on post-residency career intentions and practice management, including:

- · Learning about practice management
- Intentions following residency training
- Debt
- Practice preferences beyond residency

### **4.1 Learning About Practice Management**

For the majority of residents (58.1%), the best approach to learn about how to manage a medical practice was on the job, meaning in the OR, on the ward, in the clinic and so forth. On a related topic, final-year residents' understanding of billing codes was moderate, with the majority (55.6%) rating their understanding as either 5, 6, or 7 on a 10-point scale.

## **Best Approach for Learning About Practice Management** *N=8,641 - Weighted*

What do you consider to be the best approach for learning about practice management?	Count	Percent (%)
On the job, e.g. in the OR, on the ward, in the clinic	5,017	58.1
During an academic half day	2,266	26.2
Through external seminars	1,009	11.7
Other, please specify	349	4.0

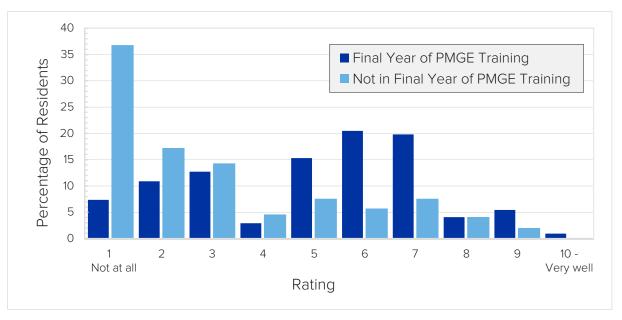
### 4.2 Understanding of Billing

### Current Understanding of Speciality Billing Codes Final Year Residents Only\* N=1,469 - Weighted

Rate your understanding of billing codes within your specialty on a scale of 1 to 10.	Count of Final Year Trainees	Percent (%) of Final Year Trainees
1 Not at all	108	7.4
2	160	10.9
3	187	12.7
4	43	2.9
5	225	15.3
6	301	20.5
7	291	19.8
8	60	4.1
9	80	5.5
10 Very well	14	1.0

<sup>\*</sup>Residents in their final year of residency training include those who did not know or had not yet decided if their current PGME was their last. This inclusion assumes that residents who can chose to pursue additional years of PGME training would be most likely to have a similar understanding of speciality billing codes than residents who stated being in their final year.





### 4.3 Intentions Following Residency Training

Residents were asked about their career intentions following residency training. Less than a fifth of residents (19.2%) definitely knew where to locate job opportunities in their medical speciality, while the majority, 56.7%, somewhat knew where to look. The leading reason (50.0%) given for selecting a place to practice medicine was proximity to family.

The survey also asked where residents intended to practice following their residency training. The majority of residents (53.4%) intend to stay and practice in their current training province, which they also considered to be their home province. An additional 11.6% intend to stay in their current training province but reported that it was not their home province. About one fifth of residents did not know or had not decided where they would seek to practice following their training. For the 10.1% of residents who plan to return to their home province or territory following training, the top three provinces to return to were British Columbia (27.2%), Ontario (21.2%), and Alberta (21%). Residents who intend to practice in a province or territory that is neither their training nor their home region will also seek to practice in these same three provinces.

When asked about their intention to locum outside their future province or territory of primary practice, less than one fifth of residents (18.5%) say that it is in their plans. Of the 81.5% of residents who are not sure or do not plan to locum outside their province or territory of primary practice, a significant proportion, 52.0%, stated that they would locum outside if no additional license applications were required.

### **Knowing Where to Find Job Opportunities**

N=8,642 - Weighted

Do you know where to locate job opportunities in your medical specialty?	Count	Percent (%)
Definitely	1,655	19.2
Somewhat	4,903	56.7
Not at all	2,084	24.1

### **Primary Reason for Selecting a Place to Practice Medicine**

N=8,642 - Weighted

The primary reason motivating where you would like to practice medicine	Count	Percent (%)
Proximity to family	4,322	50.0
Personal circumstances	1,641	19.0
Availability of position	1,527	17.7
Salary	318	3.7
Other	834	9.7

### **Practice Intentions Following Residency Training**

N=8,642 - Weighted

Where do you currently intend to practice following your residency training?	Count	Percent (%)
In my current province of training, which I consider my home province	4,612	53.4
In my current province of training, which I do not consider my home province	1,000	11.6
Return to my home province or territory to practice	872	10.1
In a province or territory other than my home and/or training province	271	3.1
In another country	212	2.5
Return to my home country to practice	7	0.1
Don't know / Not yet decided	1,668	19.3

#### **Return to Practice in a Home Province**

N=872 - Weighted

What is the home province or territory in which you would like to return to practice?*	Count	Percent (%)
British Columbia	237	27.2
Ontario	185	21.2
Alberta	183	21
Quebec	67	7.7
Manitoba	66	7.6
New Brunswick	64	7.3
Nova Scotia	52	6
Saskatchewan	15	1.7
Northwest Territories	3	0.3

<sup>\*</sup>Condition: Question limited to residents, 10.1%, who planned to return to a home province or territory that is not their currently region of training.

#### **Return to Practice in Another Province**

N=271 - Weighted

What is the other province or territory in which you would like to practice?*	Count	Percent (%)
British Columbia	117	43.2
Alberta	66	24.4
Ontario	59	21.8
Prince Edward Island	18	6.6
Yukon	11	4.1

<sup>\*</sup>Condition: Question limited to residents, 3.1%, who planned to practice medicine in a province or a territory that is not currently their home or training region.

#### **Intention to Locum**

N=8,592 - Weighted

Do you plan to locum outside the province or territory of your primary practice?	Count	Percent (%)
Yes	1,583	18.5
No	3,166	36.8
Not sure	3,843	44.7

## Intention to Locum if Additional License Requirements Were Not an Issue

N=6,991 - Weighted

Would you locum outside the province or territory of your primary practice if no additional license applications were required?*	Count	Percent (%)
Yes	3,637	52.0
No	1,039	14.9
Not sure	2,315	33.1

<sup>\*</sup>Condition: Question limited to residents, 81.5%, who were not sure if they would or did not plan to locum outside their province or territory of primary practice.

#### 4.4 Debt

Becoming a practicing physician can be costly. Residents estimated the total debt they will have following the completion of residency training to be \$127,496 on average. In contrast, nearly one fifth of residents (19%) will be debt-free by the end of their postgraduate training. At the other end of the spectrum, close to 12% of residents are anticipating a total debt of a quarter of a million dollars or more.

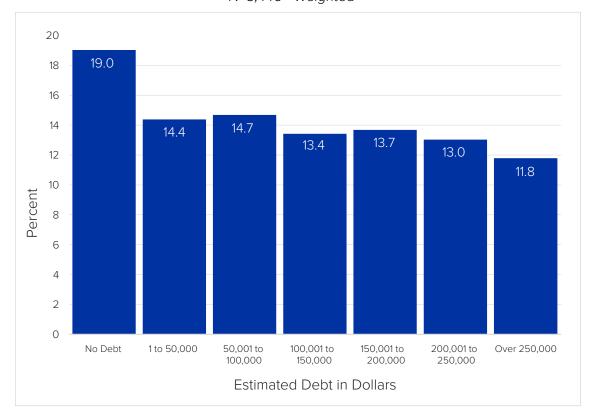
Estimated levels of debt varied by broad medical specialty. Looking at median debt, a measure that is more robust against outliers, surgical residents anticipate having the lowest level of median debt at \$100,000. At the higher end, residents in laboratory medicine expect a 50% greater debt than that, with an estimated \$150,000.

## Estimated Debt Following Residency Training by Broad Specialty

N=8,446 - Weighted

When you complete your residency training, what will be your total estimated debt?	Median	Mean
Amount in dollars, all residents	115,000	127,496
Amount in dollars, Family Medicine	110,000	136,558
Amount in dollars, Medicine	125,000	125,732
Amount in dollars, Laboratory Medicine	150,000	132,481
Amount in dollars, Surgery	100,000	120,947

## **Distribution of Estimated Debt Following Residency Training** *N=8,446 - Weighted*



## 4.5 Practice Preferences Beyond Residency

Survey respondents were asked three questions focused on their preferences relating to their future employment. The majority of residents (54.3%) said they would be willing to practice with reduced clinical autonomy in exchange for a salaried compensation model that includes health benefits, a pension, vacation time, and other benefits. This aligns with 41.2% of residents identifying the salaried model as the most appealing payment schedule among the options presented. The blended and fee-for-service models were half as favored, ranking second at 19.3% and third at 18.3%, respectively. Note that 17.0% of residents do not know which remuneration model is the most appealing to them.

Physicians typically split their time between different professional activities. Residents were therefore asked to estimate the percentage of time in practice they anticipate spending in four areas: clinical work, teaching, administration, and research. On average, residents anticipating spending the majority of their time doing clinical work (66%). This is followed by teaching (14%), administration (11%), and research (9%).

## **Employment Benefits Versus Reduced Clinical Autonomy** *N=8,515 - Weighted*

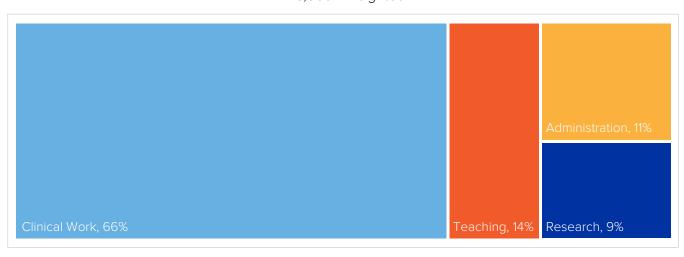
Would you be willing to practice with reduced clinical autonomy in exchange for a salaried model with health benefits, pension, vacation, etc.?	Count	Percent (%)
Yes	4,624	54.3
No	1,307	15.3
Don't know	2,584	30.3

## Most Appealing Payment Schedules for Future Practice

N=8,650 - Weighted

If you were able to choose, which of the following payment schedules would be most appealing for your future practice?	Count	Percent (%)
Salaried Model	3,567	41.2
Blended Model	1,671	19.3
Fee for Service	1,584	18.3
Capitation	160	1.8
Other	169	2.0
None of the above	31	0.4
Don't know	1,468	17.0

## Mean Anticipated Time in Practice Dedicated to Professional Activities N=8,569 - Weighted





402-222 Queen Street, Ottawa, ON K1P 5V9 Phone: 613-234-6448 | Fax: 613-234-5292 | info@residentdoctors.ca