Written Submission for the Pre-Budget Consultations in Advance of the 2019 Budget



Recommendations:

- **1.** That the government provide an additional 100 residency training spots for medical graduates of Canadian institutions into the 2019 match cycle.
- 2. That the government work with the provinces and territories to create and fund residency positions to achieve a ratio of 120 Canadian residency seats for every 100 Canadian medical graduates.
- **3.** That the government reaffirm its commitment to a pan-Canadian strategy for effective and socially-responsible physician and health workforce resource planning that is evidence-based and transparent to both medical trainees and the public.
- **4.** That the government discuss the issue of unmatched Canadian medical graduates and physician resource planning at a federal provincial-territorial health ministers' meeting.

Benefits to Canadians:

Increased residency seats will...

- 1. Improve Canadians' access to specialist and generalist care
- **2.** Bring the number of physicians per capita closer to the OECD average (Canada is currently below)
- **3.** Ensure taxpayers' investments are maximized (medical education is heavily subsidized by Canadian taxpayers spending an estimated \$260,000 per medical student)

About the Organization

The Canadian Federation of Medical Students (CFMS) is the national voice of Canadian medical students. We connect, support and represent our membership as they learn to serve patients and society. We are the national organization representing over 8,000 medical students at 15 medical schools across Canada. We are tomorrow's physicians leading for health today.

Addressing Proper Physician Resource Planning and Unmatched Canadian Medical Graduates

Problem Summary

This year, 115 new graduates from Canadian medical schools did not match to a Canadian residency position and therefore are unable to practice as physicians (1). The number of Canadian medical graduates (CMGs) that are unsuccessful in matching to a residency program has risen sharply in the last decade (2). According to the Association of Faculties of Medicine of Canada (AFMC), this number is projected to increase to over 140 by 2021 unless urgent and purposeful action is taken (3). Estimates place the tax-base investment at ~\$260,000 per medical graduate prior to entering residency (4). This represents at least a possible \$29.9M of unrealized investment this year alone.

The most significant contributing factor to the unmatched Canadian medical graduate (uCMG) crisis is the decreasing ratio of available residency positions to CMGs per given year. Residency positions are provincially funded, hosted by universities and delivered in hospitals and clinics. However, medical students apply to residency positions through an integrated nation-wide system facilitated by the Canadian Resident Matching Service (CaRMS), thus creating significant flow across provincial borders (5). The uCMG crisis is therefore a Canadawide problem requiring pan-Canadian solutions.

Canada graduates 8.0 medical graduates/100,000 individuals, which is in the bottom 5 of OECD countries (Organization for Economic Co-operation and Development) in 2016 (6). Canada's physician to population rate is 2.7 doctors/1,000 Canadians, below the 50th percentile of OECD countries in 2016 (7). Federal Physician Resource Planning Advisory Committee (PRPAC) of the Committee on Health Workforce (CHW) modeling, reports a supply of 2.2-2.4 doctors/1,000 Canadians and increasing to 2.6 doctors/1,000 Canadians by 2030. This data suggests Canada will continue to lag OECD countries in physician resource supply for meeting population needs.

Medical Education and Residency

Completing a residency is the only way that medical school graduates can practice as independent physicians in any jurisdiction in Canada. While residency is salaried employment, it constitutes mandatory medical training. The matching process is carried out by CaRMS, utilizing the Roth-Peranson Nobel prize-winning algorithm to match students to residency programs based on submitted rank order lists (5). Students are legally bound to complete residency in the program to which they matched. Students who do not secure a position in the first iteration of the CaRMS match have an opportunity to apply to unfilled seats in a second iteration that follows a similar process.

Progression of the Problem Over Time

The number of uCMGs has increased six-fold in less than a decade. In 2009, there were 11 new graduates that went unmatched, with a steady state for nearly the previous decade. In 2018, this rose to 69 and if students that did not participate in second iteration are included, it becomes 115 (1,2). The single most significant contributing factor to the crisis is the decrease in the ratio of CMGs to residency positions – dropping from 100:112 in 2009 to 100:101 in 2018. This is due to an increasing number of prior-year uCMGs participating in subsequent matches with a concurrent reduction in residency seats in certain provinces. When language differences in the available residency positions is accounted for, the ratio of Anglophone-only applicants to Anglophone spots drops to 100:98. Furthermore, there is a disproportionately high number of international medical graduates (IMGs) also competing for CMG positions, particularly in the second iteration.

The majority of uCMGs are fit and ready for clinical practice. In 2018 CaRMS match, 78% of uCMGs would have matched into a residency program had there been a position available (8). Both the CFMS and the Canadian Medical Association (CMA) propose that for every 100 CMGs there should be 120 residency positions (2,9). Evidence shows that the match algorithm works best with more degrees of freedom, which a 100:120 ratio would provide. Task Force on Physician Supply in Canada, established that CMGs to residency spot allocation should follow a ratio of 100:120 in order to accommodate CMGs' training needs, enhance opportunities for IMGs, enhance opportunities for re-entry, opportunity to train clinician scientists, and provide flexibility in career choice (10). In 2011, the ratio was 100:110; in 2017 it was 100:102 and if language proficiency requirements are considered that ratio falls to 100:98, below a ratio of 1:1.

Impacts on Medical Graduates Unable to Secure a Residency Position

There are significant negative psychological, emotional, and financial impacts associated with going unmatched. Most uCMGs re-apply in the following year's match cycle with less success. Some uCMGS are allowed by faculty to take an additional year of school, others may pursue graduate studies or transitional programs, some opt to complete residency outside Canada, and some leave medicine altogether. Unlike their matched peers, uCMGs also do not make an income. Unmatched students are a vulnerable population faced with additional obstacles and stigma unfairly impacted by a failing system.

Impacts to Canadians

The rising number of uCMGs poses significant risk to physician resource planning in Canada. Medical education is heavily subsidized by Canadian taxpayers – spending an estimated \$260,000 per medical student (4). Medical graduates who do not match and are unable to serve Canadian society as physicians represent millions in taxpayer dollars. Many Canadians still

experience barriers to specialist and generalist care, the number of physicians per capita in Canada is well below the OECD average (7), and the health care needs of the population are growing. Having large cohorts of qualified medical graduates unable to complete their training and enter the health workforce is a barrier to ensuring quality healthcare delivery.

Proposed One-time Infusion Stimulus Dollars for 100 Medical Residency Training Spots

We propose that the government provide an additional 100 residency training spots for CMGs into the 2019 match cycle to address the uCMG crisis. The 100 spots is the minimum required to temporize and reset the carry-forward from the prior cycles. We propose a divide of 60% family medicine and 40% specialty and surgical specialty residency training spots, targeted to helping vulnerable, under-served populations, and fields with high demand and/or insufficient doctor supply.

The cost breakdown would be 60% 2-year College of Family Physicians of Canada (CFPC) family medicine spots at \$125K/spot/year, with each position representing a \$250K cost over 2 years, and 40% 5-year Royal College of Physicians and Surgeons of Canada (RCPSC) specialty spots in population demand and low supply fields at \$125K/spot/year, with each position representing a \$625K cost over 5 years. Our rationale for \$125K per annum is to cover resident salary, fringe costs, and institutional stimulus dollars to cover operational, research, scholarly and staff support costs of additional trainees. These calculations are derived from the Health Canada report, "Overview of the Cost of Training Health Professionals", and adjusted with current salaries (4).*

This one-time 'top-up program' would help offset the snowball effect of an accumulating number of uCMGs from the past seven years and provide provinces and institutions time to redesign the current system. This \$40M total cost would represent 0.012% of the 2017 federal budget. We propose a rapid review process** and allocation of spots to allow these changes to take effect for the 2019 match cycle.

This top-up would require a \$40M funding envelope over 5 years, as follows:

- Year 1 \$12.5M
- Year 2 \$12.5M
- Year 3 \$5M

* PGY1 salary ranges from \$44,111 (Quebec) - \$60,795 (Maritimes), PGY5 salary ranges from \$62,287 (Quebec) - \$79,860 (Maritimes). Addition of fringe costs is ~30%. Stimulus dollars are for institutions to build necessary capacity to hire administrative support, research, scholarship, and professional staff to support additional trainees.

^{** 100} spots allocated by urgent time-limited working group of CHW/PRPAC charged to allocate spots to programs based upon application review, similar to other government new funding envelope challenges/initiatives criteria. Emphasis on specialties over-subscribed by public with insufficient supply of physicians, as well as regions with training centres that target underserved populations, communities, including low socioeconomic status, northern, remote, and Indigenous populations.

- Year 4 \$5M
- Year 5 \$5M

Conclusion

The rise in uCMGs diminishes the number of medical personnel available to serve patients across the country. As a complex, inter-provincial system, tackling this issue requires collective action on the part of our federal/provincial/territorial governments, and medical faculties (11). The matching system is Canada-wide, with hundreds of students moving across provincial lines for residency training.

The number of uCMGs has increased consistently each year for the last decade. The compounding number of uCMGs should be resolved immediately through an increase in residency positions. Specific funds to support the creation of these seats distributed across Canada will restore the system's ability to adequately match students. The need for a ratio of 120 residency positions for every 100 CMGs is needed to allow for the best chance for students to match.

With the anticipated culmination of the PRPAC 2-sided physician supply and public need model, health human resource leaders will have a more accurate tool to guide resource planning. The government should commit to using this tool in making evidence-based decisions about physician resource planning including the allocation of residency positions.

The provision and distribution of residency positions across the country is a federal issue that requires inter-provincial coordination. Given the migration of students between provinces for residency, an integrated approach is necessary to successfully develop health human resource planning to benefit all Canadians. Meetings should consult key stakeholders in the medical community such as CFMS, AFMC, CMA and CaRMS, as well as jurisdictional representatives.

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