## **Unmatched Canadian Medical Graduates**

Lucas King, University of Saskatchewan

Type of Paper: Discussion Paper

Approved: September 20th, 2020

Revised: September 15th, 2020





# **Briefing Note**

## **Unmatched Canadian Medical Graduates**

Date: September 20th, 2020 DISCUSSION PAPER

#### **Summary of Discussion Paper**

Since 2018, the number of uCMG's has declined because of advocacy work done by individuals and organizations, such as the AFMC and CFMS. However, 79 uCMG's in 2020 is still too many. The Ontario government and CAF's work to provide supernumerary positions has helped provide time for implementing long-term solutions, but that time is limited. The CoVID-19 pandemic offers the opportunity to test two drastic changes to the residency matching process. The 2021 changes are the cancellation of all visiting electives and the implementation of virtual interviews, which will reduce the barriers to students applying and interviewing broadly. Future work will likely focus on increasing the ratio of residency positions to CMG's, supporting unmatched students, reviewing entry-level disciplines, evaluating the effects of the AFMC Elective Diversification Policy and changes in application trends, unblending 2<sup>nd</sup> iteration CMG positions, pan-Canadian HHRP, and developing a pan-Canadian resident transfer system.

## Introduction

This year, 79 Canadian medical graduates (CMG's) did not match to a Canadian residency position and are therefore unable to practice as physicians. <sup>1-2</sup> While this is lower than the 2018 peak of 123, there is concern that this decrease was primarily due to temporary rather than lasting changes, such as the one-time increase in Ontario residency positions in 2018. <sup>1,3-5</sup> As a result of the relatively high unmatched rates, compared to 25 in 2009, considerable pressure is put on students to tailor their education towards matching rather than personal development. <sup>1,6-8</sup> This pressure can lead to "high dive" strategies where students spend all their elective time in one discipline, limiting their ability to parallel plan. <sup>9</sup> Going unmatched can be a devastating and life-changing experience that places significant emotional and financial stress on students as they attempt to reapply against worse odds in future years. <sup>10-12</sup> This paper aims to discuss the unmatched CMG (uCMG) problem and where work may focus in the future.

## **Analysis**

The following components should be considered when discussing this topic:

### **Residency Positions**

- The ratio of residency positions to CMG's dropped from 1.13 in 2009 to 1.04 in 2020. When exclusively considering English-speaking positions; the ratio falls below 1.0. The AFMC and CFMS advocate for a 1.1 and 1.2 ratio respectively. 6,8
- Increasing residency positions without considering specialty competitiveness, pan-Canadian Health Human Resource Planning (HHRP), and application trends may not address the problem.<sup>5,8,13-15</sup>
- Residents are eligible to participate in the 2<sup>nd</sup> iteration R-1 match and increasingly utilize it to transfer between programs, with 25 residents matching to new programs in 2020 displacing current CMG's.<sup>1,8,16</sup>
- In 2018, the Ontario government created 53 supernumerary return-of-service residency
  positions for the 2019 match cycle to reduce the number of uCMG's.<sup>3</sup> The Canadian Armed
  Forces (CAF) have also created additional positions with return-of-service contracts every year
  since 2018.<sup>17</sup> Both initiatives provided short-term relief by reducing uCMG build-up, which
  peaked in 2018.<sup>2,4,18</sup>
- In 2019, Ontario, Manitoba, and Calgary unblended 2<sup>nd</sup> iteration R-1 match positions to maintain unfilled CMG positions for CMG's rather than allowing International Medical Graduates (IMG's) to apply, after a recommendation by the AFMC.<sup>4,8</sup> This decision is made collaboratively between medical faculties and their provincial governments.

#### Selection

- ~2/3 of uCMG's would match if a position were available to them.8
- The 2013 Best Practices in Applications and Selection (BPAS) report outlined recommendations
  for residency programs to improve transparency, equity and diversity, and the quality of their
  selection processes.<sup>19-20</sup> The CFMS and the AFMC have advocated for the implementation of
  BPAS and evidence-based selection processes, with the Canadian Residency Matching Service
  (CaRMS) operationalizing changes beginning with the 2020 R-1 match.<sup>6,8,21</sup>
- In 2020, the AFMC Elective Diversification policy took effect, restricting students to 8-weeks of electives in any entry-level discipline to ensure students are well-rounded and parallel planning.<sup>22</sup> This policy will impact students applying to highly competitive specialties most, such as those Zeng et al.<sup>5</sup> described in Cluster C, who reported an average of 14.0 elective weeks and lower rates of parallel planning compared to other clusters.

#### **Regional Trends**

- Each year, more students leave Quebec than enter, leading to a net efflux of students, 50 in 2020, further reducing the number of English-speaking positions. Interestingly, in 2020 31 of 56 unfilled residency positions were from the 3 Francophone universities.
- Residency positions are funded by provincial governments, meaning local policy decisions can impact the Match nationally. For example, current restrictions on Family Physicians in Quebec may contribute to the efflux of CMG's. 4,8,15
- Canadian US medical graduates (USMG's) have equivalent rights to CMG's, and each year there
  is a net influx of ~12 with a total of 28 USMG's entering Canadian residency programs in
  2020.<sup>1,8,16</sup>

#### **Supports**

- In 2017, the CFMS passed a position paper titled *Support for Unmatched Canadian Medical Students* to advocate for increased support for uCMG's, including standardized extension to clerkship curricula, career planning resources, and comprehensive wellness and mental health resources.<sup>6</sup>
- The CFMS annually organizes the Unmatched Peer Mentorship Network, to match current and past uCMG's for one-on-one mentorship and peer support, and the *Matchbook*, a publication to educate students about the Match, which includes *The Unmatched Scenario*.<sup>23-24</sup>
- Outside of Quebec, most schools allow unmatched students to delay graduation with extension-to-clerkship programs that facilitate research, delay repayment of loans, and maintain insurance to complete electives. Many schools also offer master's degree programs students utilize to increase their chances of matching.<sup>6,24</sup> The CFMS and the AFMC have advocated for this and additional supports for students, such as career counselling, application feedback for uCMG's, a national peer mentorship network led by the medical faculties, and a pan-Canadian resident transfer system.<sup>6,8</sup>

#### **Advocacy**

- In 2018 and 2019, the CFMS and Ontario Medical Student Association independently held Lobby Days with Federal and Provincial government officials to discuss uCMG's and physician services planning.<sup>25-27</sup> In 2019, the UBC Medical Undergraduate Society similarly lobbied Provincial government officials to increase residency positions by 10%.<sup>28</sup>
- In 2020, the CFMS created a group called the *uCMG Think Tank* led by the Director of Education to bring together various CFMS stakeholders to coordinate future uCMG advocacy efforts.

#### **Future Directions**

The following are areas where future work may focus:

## **Residency Positions**

- Increasing the ratio of residency positions to CMG's to at least 1.1 with consideration of HHRP and application trends. 5-6,8,13-15
- Maintaining unfilled CMG positions for CMG's during the 2nd iteration of the R-1 Match across Canada, rather than allowing IMG's to apply for those positions.<sup>8,29</sup>
- Developing a pan-Canadian resident transfer system to prevent the displacement of current CMG's while allowing current residents to pursue alternate careers.<sup>4,8</sup>
- Reviewing and reducing the number of direct-entry residency disciplines to ensure they align
  with societal needs by supporting physician generalism and allowing for adjustment of career
  trajectory.<sup>4,14</sup>

#### Selection

- De-emphasizing electives "as auditions and more as opportunities for learning." This has been discussed widely and will be tested with the decision to cancel 2020-2021 visiting electives. 5,8,19-20,30 Evaluation of 2021 application and selection patterns may provide valuable information and inform future practices.
- Evaluating the AFMC Elective Diversification policy impact on the application, parallel planning, and selection practices will be necessary but will be less applicable to the 2021 R-1 match due to the cancellation of visiting electives.<sup>5,21,30</sup>
- Further implementing the BPAS recommendations through increased collaboration between UME and PGME leadership and valuing diverse experiences, all CanMEDs competencies, diverse applicants, and not overemphasizing discipline- or site-specific electives.<sup>8,19-20</sup>
- Reducing applicant costs by reducing application fees, using centralized or virtual interviews, and de-emphasizing the need for local electives to allow students to apply and interview more broadly.<sup>7-8,31</sup> Virtual interviews will be trialled in 2021, presenting an opportunity to examine this in-detail.<sup>32</sup>

#### **Regional Trends**

Committing to pan-Canadian HHRP through the Physician Resource Planning Advisory
 Committee (PRPAC) to ensure local circumstances do not impact the integrity of the R-1 Match
 nationally and available positions meet population needs. 8,14-15

#### **Supports**

- Implementing a formalized feedback system for uCMG's after the 2nd iteration of the R-1 Match upon request, including composite application section scores and anonymous aggregate narrative comments.<sup>6,31</sup>
- Organizing a national peer mentorship network, led by the AFMC and medical faculties, for past uCMG's to provide support and mentorship for current uCMG's.<sup>6</sup>

## **Summary**

Since 2018, the number of uCMG's has declined because of advocacy work done by individuals and organizations, such as the AFMC and CFMS. However, 79 uCMG's in 2020 is still too many. The Ontario government and CAF's work to provide supernumerary positions has helped provide time for implementing long-term solutions, but that time is limited. The CoVID-19 pandemic offers the opportunity to test two drastic changes to the residency matching process. The 2021 changes are the cancellation of all visiting electives and the implementation of virtual interviews, which will reduce the barriers to students applying and interviewing broadly. Future work will likely focus on increasing the ratio of residency positions to CMG's, supporting unmatched students, reviewing entry-level disciplines, evaluating the effects of the AFMC Elective Diversification Policy and changes in application trends, unblending 2<sup>nd</sup> iteration CMG positions, pan-Canadian HHRP, and developing a pan-Canadian resident transfer system.

## References

- Canadian Residency Matching Service. R-1 Data and reports [Internet]. 2020 [cited 2020 Sep 4].
   Available from: <a href="https://www.carms.ca/data-reports/r1-data-reports/">https://www.carms.ca/data-reports/r1-data-reports/</a>
- Sanfilippo A. Why medical students go unmatched, and why they deserve an opportunity to complete their training. [Internet]. 2018 [cited 2020 Sep 4]. Available from: https://meds.queensu.ca/ugme-blog/archives/3996
- 3. Birak C. Ontario to fund more residency positions for graduating doctors [Internet]. CBC News. 2018 [cited 2020 Sep 4]. Available from: <a href="https://www.cbc.ca/news/health/residency-ontario-1.4623120">https://www.cbc.ca/news/health/residency-ontario-1.4623120</a>
- 4. Vogel L. Canada's residency mismatch shrinking but still "alarming." CMAJ [Internet]. 2019;191(18):E511. Available from: <a href="https://cmajnews.com/2018/01/25/more-supports-for-unmatched-medical-students-coming-soon-cmaj-109-5559/">https://cmajnews.com/2018/01/25/more-supports-for-unmatched-medical-students-coming-soon-cmaj-109-5559/</a>
- 5. Zeng A, Brenna C, Ndoja S. Fundamental trends within falling match rates: insights from the past decade of Canadian residency matching data. Can Med Educ J [Internet]. 2020;11(3):e31-42. Available from: <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7378143/">www.ncbi.nlm.nih.gov/pmc/articles/PMC7378143/</a>
- 6. Apramian T, Ramazani F, Lee D, Patel P, Chandna N, Jajarmi Y, et al. Support for unmatched Canadian medical students [Internet]. 2017. Available from: <a href="https://www.cfms.org/files/position-papers/agm">https://www.cfms.org/files/position-papers/agm</a> 2017 support unmatched.pdf
- 7. Silverberg SL, Purdy KMH. Unmatched Canadian medical graduates. CMAJ [Internet]. 2018;190(4):E118. Available from: <a href="https://www.cmaj.ca/content/190/4/E118">https://www.cmaj.ca/content/190/4/E118</a>
- The Association of Faculties of Medicine of Canada. Reducing the number of unmatched Canadian medical graduates: a way forward [Internet]. 2018. Available from: <a href="https://afmc.ca/sites/default/files/pdf/AFMC">https://afmc.ca/sites/default/files/pdf/AFMC</a> reportreducingunmatchedcdnmg EN.pdf
- Courneya CA, Cheung WY, McMillan J. High dives and parallel plans: relationships between medical student elective strategies and residency match outcomes. Can Med Educ J [Internet].
   2019;11(3):e4-12. Available from: <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7378142/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7378142/</a>
- 10. Izenberg D, Marwaha S, Tepper J. Medical students who don't match through CaRMS: "it's like a scarlet letter" [Internet]. Healthy Debate. 2018 [cited 2020 Sep 4]. Available from: https://healthydebate.ca/2018/03/topic/medical-students-carms
- 11. Persad A. The unmatched. Can Med Educ J [Internet]. 2018;9(2):e89-92. Available from: <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6044311/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6044311/</a>
- 12. Purdy K, Silverberg S. Canadian Federation of Medical Students (CFMS) response to: The unmatched by Dr. Amit Persad. Can Med Educ J [Internet]. 2018;9(2):e93-4. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6044303/
- 13. Sorokopud-Jones M. The increase in unmatched Canadian medical graduates: who is to blame and should we be concerned? Univ Manitoba J Med [Internet]. 2018;1(1):9–11. Available from: <a href="https://ojs.lib.umanitoba.ca/index.php/UMMedJournal/article/view/651">https://ojs.lib.umanitoba.ca/index.php/UMMedJournal/article/view/651</a>
- The Association of Faculties of Medicine of Canada. Transition to residency call to action [Internet].
   Available from: <a href="https://afmc.ca/sites/default/files/pdf/2018-Transition-to-Residency-Report EN.pdf">https://afmc.ca/sites/default/files/pdf/2018-Transition-to-Residency-Report EN.pdf</a>
- 15. Wilson R, Bordman Z. What to do about the Canadian Resident Matching Service. CMAJ [Internet]. 2017;189(47):E1436-7. Available from: <a href="https://www.cmaj.ca/content/189/47/E1436">https://www.cmaj.ca/content/189/47/E1436</a>

- 16. Canadian Residency Matching Service. Eligibility criteria [Internet]. 2020 [cited 2020 Sep 4]. Available from: <a href="https://www.carms.ca/match/r-1-main-residency-match/eligibility-criteria/">https://www.carms.ca/match/r-1-main-residency-match/eligibility-criteria/</a>
- 17. Canadian Federation of Medical Students. Medical officer training program for unmatched students MOTP surge [Internet]. 2020 [cited 2020 Sep 4]. Available from: <a href="https://www.cfms.org/what-we-do/education/motp">https://www.cfms.org/what-we-do/education/motp</a>
- 18. Grant K. Number of Canadian medical graduates denied residency placements declines to four-year low [Internet]. The Globe and Mail. 2019 [cited 2020 Sep 4]. Available from:

  <a href="https://www.theglobeandmail.com/canada/article-number-of-canadian-medical-graduates-denied-residency-placements/">https://www.theglobeandmail.com/canada/article-number-of-canadian-medical-graduates-denied-residency-placements/</a>
- 19. Bandiera G, Abrahams C, Cipolla A, Dosani N, Edwards S, Fish J, et al. Best practices in applications selection [Internet]. 2013. Available from: <a href="https://pg.postmd.utoronto.ca/wp-content/uploads/2016/06/BPASDraftFinalReportPGMEACMay2013.pdf">https://pg.postmd.utoronto.ca/wp-content/uploads/2016/06/BPASDraftFinalReportPGMEACMay2013.pdf</a>
- Bandiera G, Abrahams C, Ruetalo M, Hanson MD, Nickell L, Spadafora S. Identifying and promoting best practices in residency application and selection in a complex academic health network. Acad Med [Internet]. 2015;90(12):1594–601. Available from: <a href="https://pubmed.ncbi.nlm.nih.gov/26488571/">https://pubmed.ncbi.nlm.nih.gov/26488571/</a>
- 21. Canadian Residency Matching Service. BPAS and CaRMS [Internet]. 2019 [cited 2020 Sep 9]. Available from: https://www.carms.ca/news/bpas-and-carms/
- 22. The Association of Faculties of Medicine of Canada. Elective diversification [Internet]. 2020 [cited 2020 Sep 4]. Available from: <a href="https://afmc.ca/en/priorities/elective-diversification">https://afmc.ca/en/priorities/elective-diversification</a>
- 23. Canadian Federation of Medical Students. Details on CFMS supports for Match Day 2020 [Internet]. 2020 [cited 2020 Sep 4]. Available from: <a href="https://www.cfms.org/what-we-do/education/unmatched-support">https://www.cfms.org/what-we-do/education/unmatched-support</a>
- 24. Canadian Federation of Medical Students. The Matchbook [Internet]. 2019 [cited 2020 Sep 4]. Available from: <a href="https://www.cfms.org/what-we-do/education/cfms-matchbook">https://www.cfms.org/what-we-do/education/cfms-matchbook</a>
- 25. Canadian Federation of Medical Students. Press release: medical students meet with members of parliament to advocate for improved residency match rates [Internet]. 2019 [cited 2020 Sep 4]. Available from: <a href="https://www.cfms.org/news/2019/04/30/press-release-medical-students-meet-with-members-of-parliament-to-advocate-for-improved-residency-match-rates">https://www.cfms.org/news/2019/04/30/press-release-medical-students-meet-with-members-of-parliament-to-advocate-for-improved-residency-match-rates</a>
- 26. Canadian Federation of Medical Students. Press release: CFMS strongly urges Government of Canada to provide sustainable solutions to Canadian medical graduates unable to secure a residency training position [Internet]. 2018 [cited 2020 Sep 4]. Available from: <a href="https://www.cfms.org/news/2018/05/29/press-release-cfms-strongly-urges">https://www.cfms.org/news/2018/05/29/press-release-cfms-strongly-urges</a>
- 27. Ontario Medical Students Association. Lobby day [Internet]. 2019 [cited 2020 Sep 4]. Available from: <a href="https://omsa.ca/en/lobby-day">https://omsa.ca/en/lobby-day</a>
- 28. Lazaruk S. Fearing shortage of residencies, BC med students lobby health minister [Internet]. Vancouver Sun. 2019 [cited 2020 Sep 4]. Available from: <a href="https://vancouversun.com/news/local-news/fearing-shortage-of-residencies-b-c-med-students-lobby-health-minister-for-more-spots">https://vancouversun.com/news/local-news/fearing-shortage-of-residencies-b-c-med-students-lobby-health-minister-for-more-spots</a>
- 29. Moineau G. Association of Faculties of Medicine of Canada response to: The unmatched by Dr. Amit Persad. Can Med Educ J [Internet]. 2018;9(2):e95-6. Available from: <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6044299/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6044299/</a>

- 30. The Association of Faculties of Medicine of Canada. CoVID-19 [Internet]. 2020 [cited 2020 Sep 4]. Available from: <a href="https://afmc.ca/en/priorities/covid19">https://afmc.ca/en/priorities/covid19</a>
- 31. Chanchlani N. Seeking a better (residency) match. CMAJ [Internet]. 2014;186(13):979–80. Available from: <a href="https://www.cmaj.ca/content/186/13/979">https://www.cmaj.ca/content/186/13/979</a>
- 32. The Association of Faculties of Medicine of Canada. AFMC decision regarding the 2021 R-1 match [Internet]. 2020 [cited 2020 Sep 4]. Available from: <a href="https://afmc.ca/en/media-releases/afmc-decision-regarding-the-2021-r1-match">https://afmc.ca/en/media-releases/afmc-decision-regarding-the-2021-r1-match</a>