

## **Leadership: A Valuable Component of Canadian Medical Education**

Lucas King (University of Saskatchewan)

Kate Uhlman (McMaster University)

Adrina Zhong (Western University)

Jessica Garabon (Western University)

George Cai (University of Manitoba)

Reem Aziz (University of British Columbia)

Joseph Boyle (Northern Ontario School of Medicine)

Angela Fan (Western University)

Maria Leis (University of Toronto)

*Type of Paper: Position Paper*

**Approved: September 20th, 2020**

*Revised: September 15th, 2020*



**CFMS**  
Canadian Federation  
of Medical Students

**FEMC**

Fédération des étudiants et des  
étudiantes en médecine du Canada



# Leadership: A Valuable Component of Canadian Medical Education

Date: September 20th, 2020

Position Paper

## Summary of Position Paper

Leadership development has long been an undervalued component of medical education and physician advancement. Recent recommendations from the Association of Faculties of Medicine of Canada (AFMC) and the Royal College of Physicians and Surgeons of Canada (RCPS) have promoted the value of providing leadership education and providing practical opportunities for students to develop leadership skills. In September 2019, the Canadian Federation of Medical Students (CFMS) general assembly similarly selected leadership development as a priority for the CFMS to pursue. This position paper examines the role of leadership in medical education. It establishes a set of principles, concerns, and recommendations to increase opportunities for students to become involved in leadership, receive leadership training and mentorship, and to improve the perceived value of leadership. Furthermore, the paper supports the need for increased equity, diversity, and inclusivity within leadership.

## Principles/Stance

### Leadership:

- Training and mentorship are essential and relevant components of formal and informal medical education for all students, regardless of whether they hold formal leadership roles.
- Involvement should be fostered, recognized, and valued by Canadian medical schools.

### All Canadian medical schools ought to provide students with opportunities to:

- Pursue leadership training beyond the base curriculum.
- Work with medical leaders outside of traditional clinical scenarios.

### Equity, Diversity, and Inclusivity:

- Equity, diversity, and inclusivity within leadership are valuable at all levels of the medical profession.

## Recommendations

### Integrate:

- Leadership training into Canadian medical curricula, as outlined in the 2016 CFMS *Advocacy and Leadership in Canadian Medical Student Curricula Policy Paper*.

### Develop:

- Joint leadership certificate and degree programs for students interested in leadership.

### Provide:

- Six (6) or more leadership absences each academic year, exceptional to personal days and planned absences, and indicate more absences may be granted on a case-by-case basis.
- Leadership opportunities for students to facilitate growth and development of leadership skills.
- Students with the opportunity to work with physician leaders throughout their formal training.

### Collaborate:

- With the local MSA, conduct an environmental scan to examine equity, diversity, and inclusivity in student leadership opportunities and develop a strategy to address any identified gaps

## Introduction

Over the past decade, leadership has become a focus of medical education at all levels, as illustrated by its inclusion in 5 consecutive Future of Medical Education in Canada (FMEC) reports from 2010-2020.<sup>1-5</sup> In 2015, the Royal College of Physicians and Surgeons of Canada (RCPSC) changed the “Manager” CanMEDs role to “Leader” as “a timely evolution for contemporary health care.”<sup>6</sup> The RCPSC definition of the CanMEDs Leader role is:

*“As Leaders, physicians engage with others to contribute to a vision of a high-quality health care system and take responsibility for the delivery of excellent patient care through their activities as clinicians, administrators, scholars, or teachers.”*

Within the extended description, the RCPSC discusses how leadership can be seen at all levels, from patient care to healthcare leadership positions.<sup>6</sup> Importantly, physicians do not require an official role to be considered leaders.<sup>6</sup> Building on this sentiment, Till et al<sup>7</sup> recommend reframing leadership as part of the professional identity of becoming a physician to normalize leadership and address leadership concerns, such as those relating to lack of support, compensation, recognition, and training.<sup>8</sup> Furthermore, a Canadian Medical Association (CMA) survey revealed these negative perceptions were present from medical school to clinical practice, which may disincentivize formal leadership roles.<sup>8</sup> Survey respondents further identified a lack of leadership training to be a substantial barrier to physician leadership and recommended introducing training at all levels.<sup>8</sup>

Currently, Undergraduate Medical Education (UME) prioritizes the Medical Expert CanMEDs role often at the expense of content development and engagement related to other CanMEDs roles, including leadership.<sup>7,9,10</sup> Without objective methods to assess leadership curricula, student engagement may be low.<sup>7,9,11,12</sup> This may be addressed by integrating leadership skills longitudinally into existing curricula, providing opportunities for students to practically apply what they are learning and emphasizing the importance of leadership skills for career advancement.<sup>7,9,11,12</sup>

After the Associations of Faculties of Medicine of Canada’s (AFMC) implementation of Best Practices in Applications and Selection (BPAS), the selection criteria for residency programs have been expanded, with many programs beginning to endorse leadership skills as a component of the file review and interview process.<sup>13-15</sup> To further emphasize the value of leadership, medical schools have begun to implement joint certificate (e.g. Memorial University Physician Leadership Certificate) and degree programs (e.g. University of Toronto MSc in Systems Leadership and Innovation) in addition to providing opportunities for students to become involved in UME committees.<sup>3,16,17</sup> Others have developed specific electives (e.g. University of Ottawa) and leadership half-days within clinical rotations.<sup>18,19</sup> Faculties’ value of leadership may also be demonstrated through awards recognizing outstanding contributions or by dedicating time and travel funding to attend conferences or training.<sup>3,8,20</sup>

The FMEC 2015 report states, “Faculties of Medicine must recruit, select, and support a representative mix of medical students,” further validating equity, diversity, and inclusivity (EDI) as meaningful pursuits of leadership.<sup>3</sup> Groups that are historically underrepresented in medicine (e.g. racialized, women, LGBTQ2S+, etc.) are now joining the profession faster than ever before, but continue to be disproportionately underrepresented in leadership positions.<sup>21-24</sup> Medical education and healthcare leaders must reflect their diverse patient populations.<sup>21,25</sup> Mentorship programs that incorporate EDI in leadership development (e.g. University of Toronto, Diversity Mentorship Program), may increase diversity in academic leadership positions and allow learners to explore their full potential.<sup>26-28</sup>

## Principles/Stance

*The CFMS endorses the following statements to support student leadership development:*

1. Leadership training and mentorship are essential and relevant components of formal and informal medical education for all students, regardless of whether they hold formal leadership roles.
2. All Canadian medical schools ought to provide students with opportunities to work with medical leaders outside of traditional clinical scenarios.
3. All Canadian medical schools ought to provide students with opportunities to pursue leadership training beyond the base curriculum.
4. Leadership involvement should be fostered, recognized, and valued by Canadian medical schools.
5. Equity, diversity, and inclusivity within leadership are valuable at all levels of the medical profession.

## Concerns

1. Student engagement in curricular content beyond that of the CanMEDs medical expert role, particularly leadership, is often low.
2. While medical schools have implemented leadership training into their curricula, there are few formal opportunities for students to work with and learn from physicians in leadership contexts.
3. Between universities, there are large differences in leadership absence policies. For example, one policy explicitly provides students with six (6) leadership absences each year.<sup>29</sup> In contrast, others require students to use personal vacation time to participate in leadership work. Denial of absence requests and policies that restrict leadership involvement may negatively affect the perceived value of student leadership, engagement, and future opportunities.
4. Negative perceptions of and a lack of support for healthcare leadership may impact how students look at and value leadership opportunities.

## Recommendations

*The CFMS has compiled the following list of recommendations for Canadian medical schools to support student leadership development:*

### **1. Integrate leadership training into Canadian medical curricula, as outlined in the 2016 CFMS *Advocacy and Leadership in Canadian Medical Student Curricula Policy Paper*.<sup>30</sup>**

In 2016, the CFMS passed the *Advocacy and Leadership in Canadian Medical Student Curricula Policy Paper*, advocating for integrating an Advocacy and Leadership Curriculum (ALC) into all Canadian medical schools.<sup>30</sup> This paper outlines learning objectives that could serve as guiding principles for an ALC and provides a sample Curriculum, Competencies, and Evaluation and Implementation Guidelines that may be used by medical school faculties as a framework to structure their ALC.

### **2. Provide students with the opportunity to work with physician leaders throughout their formal training.**

In some cases, this may be in the form of classroom teaching, but an emphasis should be placed on finding ways for students to be exposed to leadership in action throughout all years. By exposing students to physician leaders' work, a greater interest in leadership and relationship and skill development between the leader and student may be fostered. Students' opportunities may include shadowing physician leaders, leadership electives, and leadership half-days during clinical placements.<sup>3,18,19</sup> These opportunities should focus on experiences that students would not otherwise be exposed to during their education and could include leadership in healthcare administration, medical education, and community-based leadership.<sup>3</sup>

### **3. Develop joint leadership certificate and degree programs for students interested in leadership.**

Providing more opportunities for students to pursue leadership training will help produce better leaders and show students and physicians that medical schools value leadership. Medical schools should work towards providing two levels of training: a certificate program that may be completed concurrently with the base curriculum and a joint-degree program that would require students to extend their education. The University of Ottawa and Memorial University are examples of schools that have implemented leadership certificate programs.<sup>3,16</sup> The University of Calgary and University of Toronto have implemented joint-degree leadership programs, while the University of Alberta and University of Saskatchewan have implemented joint MD-MBA programs.<sup>17,31-33</sup> A study evaluating the impact of MD-MBA programs found that the majority of students who graduated from such programs pursued careers with extensive postgraduate medical training while leveraging leadership perspectives and skills to improve healthcare delivery.<sup>34</sup>

#### **4. Provide leadership opportunities for students to facilitate growth and development of leadership skills.**

Every school already provides leadership opportunities for students in varying degrees. However, it is essential to acknowledge and reinforce that there are many ways to expose students to physician leaders and provide leadership training beyond the curriculum. The UME administration plays a critical role in providing students with practical opportunities to become involved with academic leadership as change-makers and learners.<sup>3</sup> Milles et al.<sup>35</sup> explored the concept of bringing students in as “module co-directors” for curriculum development and found students and faculty positively received their model. When including students on committees, or other UME roles, this inclusion should be approached not only as an opportunity to hear the students’ perspective but also to mentor and teach students how to work effectively within the medical education system. Additionally, it may be beneficial to encourage peer-to-peer leadership through mentorship programs and student government to foster leadership skill development within the student body and prepare students for future leadership roles.<sup>3,35,36</sup>

#### **5. Grant six (6) or more leadership absences each academic year, exceptional to personal days and planned absences, and indicate more absences may be granted on a case-by-case basis.**

One of the difficulties of taking on student leadership roles is that it requires a flexible schedule and the ability to take time away from clinical duties, to attend meetings, conferences, or fulfill other responsibilities. While students should not miss extended periods of their education, these experiences are often valuable for their impact on the student, other students, and the medical school. To facilitate leadership development, show students the value of leadership, and encourage them to become involved medical schools should provide a defined number of absences, specifically for leadership opportunities. Each medical school will need to determine the exact definition of what qualifies for a leadership absence. However, it should not be exclusive to local medical student association (MSA) or CFMS-related duties. Physician leaders often lead in informal ways, and that concept should also be applied to students to allow for a broader scope of what is considered as a leadership absence.<sup>3,8</sup>

#### **6. In collaboration with the local MSA, conduct an environmental scan to examine equity, diversity, and inclusivity in student leadership opportunities and develop a strategy to address any identified gaps.**

In collaboration with local MSAs, medical schools should conduct an environmental scan to examine equity, diversity, and inclusivity (EDI) in student leadership opportunities. The scan results should be used to develop a strategy to reduce barriers to EDI in student leadership, empower organizations, such as the University of Alberta Indigenous Medical Dental Student Association and Black Medical Student Association of Canada, and reduce identified gaps in collaboration with the local MSAs, CFMS, and other stakeholders.<sup>37,38</sup> Collaborative approaches between faculty, especially those passionate about EDI with diverse backgrounds, and student organizations are essential for creating positive changes.<sup>39</sup> Faculty involvement facilitates long-term sustainability, provides organizational support for student organizations, and can foster institutional culture change.<sup>35,39</sup>

## References

1. The Association of Faculties of Medicine of Canada. The future of medical education in Canada (FMEC): a collective vision for MD education [Internet]. 2010. Available from: [https://afmc.ca/sites/default/files/pdf/2010-FMEC-MD\\_EN.pdf](https://afmc.ca/sites/default/files/pdf/2010-FMEC-MD_EN.pdf)
2. The Association of Faculties of Medicine of Canada. A collective vision for postgraduate medical education in Canada [Internet]. 2012. Available from: [https://afmc.ca/sites/default/files/pdf/2012-FMEC-MD\\_EN.pdf](https://afmc.ca/sites/default/files/pdf/2012-FMEC-MD_EN.pdf)
3. The Association of Faculties of Medicine of Canada. The future of medical education in Canada (FMEC): a collective vision for MD education [Internet]. 2015. Available from: <https://www.afmc.ca/pdf/fmec/FMEC-MD-2015.pdf>
4. The Association of Faculties of Medicine of Canada. Supporting learning and continuous practice improvement for physicians in Canada: a new way forward [Internet]. 2019. Available from: [https://afmc.ca/sites/default/files/pdf/2019-FMEC-MD\\_EN.pdf](https://afmc.ca/sites/default/files/pdf/2019-FMEC-MD_EN.pdf)
5. The Association of Faculties of Medicine of Canada. FMEC 2020: one vision forward [Internet]. 2020. Available from: [https://afmc.ca/sites/default/files/pdf/2020-FMEC\\_en.pdf](https://afmc.ca/sites/default/files/pdf/2020-FMEC_en.pdf)
6. The Royal College of Physicians and Surgeons of Canada. CanMEDS 2015: from Manager to Leader [Internet]. 2015. Available from: <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKewiwkdC7pbzrAhUGTN8KHZ4UA9AQFjAAegQIBhAB&url=http%3A%2F%2Fwww.royalcollege.ca%2Frcsite%2Fdocuments%2Fcbd%2Fcanmeds-2015-manager-to-leader-e.pdf&usg=AOvVaw35uR-SiTCQjtkmguX9ZaPT>
7. Till A, Mckimm J, Swanwick T. Twelve tips for integrating leadership development into undergraduate medical education. *Med Teach* [Internet]. 2018;40(12):1214–20. Available from: <https://doi.org/10.1080/0142159X.2017.1392009>
8. Van Aerde J. Understanding physician leadership in Canada: overview of a CSPE/CMA/CHI study. *Canadian Journal of Physician Leadership* [Internet]. 2015;1(4):30–2. Available from: <https://physicianleaders.ca/assets/leadershiparticle.pdf>
9. Chen T-Y. Medical leadership: an important and required competency for medical students. *Tzu Chi Med J*. 2018;30(2):66–70. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5968745/>
10. Cadieux DC, Lingard L, Kwiatkowski D, Van Deven T, Bryant M, Tithecott G. Challenges in translation: lessons from using business pedagogy to teach leadership in undergraduate medicine. *Teach Learn Med* [Internet]. 2017;29(2):207–15. Available from: <http://dx.doi.org/10.1080/10401334.2016.1237361>
11. Lyons O, Su'a B, Locke M, Hill A. A systematic review of leadership training for medical students. *N Z Med J*. 2018;131(1468):75–84. Available from: <https://www.nzma.org.nz/journal-articles/a-systematic-review-of-leadership-training-for-medical-students>
12. Webb AMB, Tsipis NE, McClellan TR, McNeil MJ, Xu MM, Doty JP, et al. A first step toward understanding best practices in leadership training in undergraduate medical education: a systematic review. *Acad Med*. 2014;89(11):1563–70. Available from: <https://pubmed.ncbi.nlm.nih.gov/25250751/>



13. 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*. 2015;90(12):1594–601. Available from:
14. The Association of Faculties of Medicine of Canada. Reducing the number of unmatched Canadian medical graduates: a way forward [Internet]. 2018. Available from: [https://afmc.ca/sites/default/files/documents/en/Publications/AFMC\\_reportreducingunmatchedcdnmg\\_en.pdf](https://afmc.ca/sites/default/files/documents/en/Publications/AFMC_reportreducingunmatchedcdnmg_en.pdf)
15. The Canadian Residency Matching Service. Program Descriptions - Archives [Internet]. 2020 [cited 2020 Aug 27]. Available from: <https://www.carms.ca/match/r-1-main-residency-match/program-descriptions-archive-first-iteration/>
16. Maddalena V. Leadership training for undergraduate medical students. *Leadersh Heal Serv*. 2016;29(3):348–51. Available from: <https://pubmed.ncbi.nlm.nih.gov/27397754/>
17. University of Toronto Institute of Health Policy, Management and Evaluation. System Leadership and Innovation [Internet]. 2020 [cited 2020 Aug 27]. Available from: <https://ihpme.utoronto.ca/a>
18. Lamont RI, Chapman ALN. Incorporating medical leadership into undergraduate curricula: a proposal for a spiral curriculum. *Leadersh Heal Serv*. 2019;32(3):435–44. Available from: <https://pubmed.ncbi.nlm.nih.gov/31298082/>
19. University of Ottawa Faculty of Medicine. Undergraduate medical education leadership curriculum [Internet]. 2020 [cited 2020 Aug 27]. Available from: <https://med.uottawa.ca/undergraduate/education/social-accountability/associated-programs/leadership>
20. McGill University Medical Students' Society. MSS leadership award [Internet]. 2020 [cited 2020 Aug 27]. Available from: [https://www.mcgillmed.com/mss-general-council/awards-winners\\_2020/](https://www.mcgillmed.com/mss-general-council/awards-winners_2020/)
21. Canadian Medical Association. “You cannot be what you cannot see”: CMA launches equity and diversity policy [Internet]. *Canadian Medical Association News*. 2020 [cited 2020 Aug 27]. Available from: <https://www.cma.ca/news/you-cannot-be-what-you-cannot-see-cma-launches-equity-and-diversity-policy>
22. Ciolfe T. Female doctors are on the rise in Canada [Internet]. *Maclean's*. 2017 [cited 2020 Aug 27]. Available from: <https://www.macleans.ca/news/canada/female-doctors-are-on-the-rise-in-canada/>
23. Glauser W. Medicine changing as women make up more of physician workforce [Internet]. *Canadian Medical Association Journal News*. 2018 [cited 2020 Aug 27]. Available from: <https://cmajnews.com/2018/03/08/medicine-changing-as-women-make-up-more-of-physician-workforce-cmaj-109-5577/>
24. Mazur A. Queen's University offers fast-tracked medical program exclusively to Black, Indigenous students [Internet]. *Global News*. 2020 [cited 2020 Aug 27]. Available from: <https://globalnews.ca/news/7215145/queens-university-medical-program-black-indigenous/>
25. Nivet MA, Berlin A. Workforce diversity and community-responsive health-care institutions. *Public Health Rep*. 2014;129(Suppl 2):15–8. Available from: <https://pubmed.ncbi.nlm.nih.gov/24385660/>
26. Choi AMK, Moon JE, Steinecke A, Prescott JE. Developing a culture of mentorship to strengthen academic medical centers. *Acad Med*. 2019;94(5):630–3. Available from: <https://pubmed.ncbi.nlm.nih.gov/31026234/>



27. Rodríguez JE, Campbell KM, Fogarty JP, Williams RL. Underrepresented minority faculty in academic medicine: a systematic review of URM faculty development. *Fam Med*. 2014;46(2):100–4. Available from: <https://pubmed.ncbi.nlm.nih.gov/24573516/>
28. University of Toronto Faculty of Medicine. Diversity Mentorship Program and Resources [Internet]. 2020 [cited 2020 Aug 27]. Available from: <https://medicine.utoronto.ca/about/diversity-mentorship-program>
29. University of Saskatchewan College of Medicine. Student Leadership Absence Policy [Internet]. 2019 [cited 2020 Aug 28]. Available from: <https://medicine.usask.ca/policies/student-leadership-absence-policy.php>
30. Benrimoh D, Hodgson E, Demko N, Chen BY, Habte R, Dandurand-Bolduc C, et al. Policy paper: advocacy and leadership in Canadian medical student curricula [Internet]. Canadian Federation of Medical Students. 2016. Available from: [https://www.cfms.org/files/position-papers/2016\\_advocacy%20and%20leadership.pdf](https://www.cfms.org/files/position-papers/2016_advocacy%20and%20leadership.pdf)
31. University of Alberta Alberta School of Business. Doctor of Medicine - MBA Combined Degree [Internet]. 2020 [cited 2020 Aug 28]. Available from: <https://www.ualberta.ca/business/programs/mba/degree-programs/md-mba.html>
32. University of Calgary Cumming School of Medicine. Leaders in Medicine Program [Internet]. [cited 2020 Aug 28]. Available from: <https://cumming.ucalgary.ca/lim/>
33. University of Saskatchewan Edwards School of Business. Master of Business Administration [Internet]. 2020 [cited 2020 Aug 28]. Available from: <https://www.edwards.usask.ca/programs/mba/>
34. Krupat E, Dienstag JL, Kester WC, Finkelstein SN. Medical students who pursue a joint MD/MBA degree: who are they and where are they heading? *Eval Heal Prof*. 2017;40(2):203–18. Available from: <https://pubmed.ncbi.nlm.nih.gov/26801747/>
35. Milles LS, Hitzblech T, Drees S, Wurl W, Arends P, Peters H. Student engagement in medical education: a mixed-method study on medical students as module co-directors in curriculum development. *Med Teach* [Internet]. 2019;41(10):1143–50. Available from: <https://doi.org/10.1080/0142159X.2019.1623385>
36. Nimmons D, Giny S, Rosenthal J. Medical student mentoring programs: current insights. *Adv Med Educ Pract*. 2019;10:113–23. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6404673/>
37. Black Medical Students' Association of Canada. Black Medical Students' Association of Canada [Internet]. Twitter. 2020 [cited 2020 Aug 28]. Available from: <https://twitter.com/bmsacanada?lang=en>
38. University of Alberta Indigenous Medical and Dental Student Association. UofA Indigenous Medical and Dental Student Association [Internet]. Facebook. 2020 [cited 2020 Aug 28]. Available from: <https://www.facebook.com/UofAIMDSA/>
39. Moss JL, Hardy EC, Cooley KAL, Cuffe SN, Lang ML, Kennedy AB. Students advocating for diversity in medical education. *MedEdPublish* [Internet]. 2019;8(3):1–11. Available from: <https://www.mededpublish.org/manuscripts/2705>