

# Aligning education to societal needs

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## Valorization

This thesis was conducted to support health professions schools in their pursuit of social accountability. The knowledge generated from this thesis aimed to enhance the alignment between education and society, and ultimately improve population health. Overall, the results hold significant importance to health profession schools, professional regulators, policymakers, educators, and researchers. In this section, the process of knowledge translation, its contributions, scientific and social relevance will be discussed as well as the identification of target groups and associated activities and products.

**Research.** The main objectives of this thesis were to identify indicators to facilitate the operationalization of social accountability and to understand their practical application at the regional and school level. The thesis is organized into six chapters: an introductory chapter, followed by four empirical studies (Chapters 2 to 5), and a concluding synthesis in Chapter 6.

Chapters 2 to 5 offer a breadth of research strategies, spanning from a narrative review of prominent social accountability frameworks to an international survey of social accountability indicators, and an example of applying large-scale data to evaluate social accountability. These chapters build upon each other, transitioning from theoretical foundations to international perspectives, followed by an in-depth examination of the Canadian context. The process of mapping medical school service regions and examining national in-region graduate retention patterns further refines the insights derived from previous chapters. Lastly, Chapter 6 introduces a programmatic systems-in-evaluation approach that deepens the understanding of social accountability by exploring the interconnectedness between educational components and their collective impact of the local community.

The insights derived from this thesis extends previous literature and advances the social accountability agenda of health professions education. The thesis notably identifies critical gaps in the evaluation and measurement of social accountability in practice and showcases an approach using large-scale data to measure social accountability. Additionally, this thesis highlights the pivotal role of the local community context and emphasizes the need to evaluate social accountability at the level of institutional service regions. This novel approach provides a starting point to bridge the gap between theoretical principles and their practical implementation, yielding tangible benefits for both education and society.

Chapters 2 and 3 identified operational gaps, laying the groundwork for targeted quality improvements in how institutions evaluate and measure social accountability. Addressing the lack of focus on educational outcomes and societal impacts, these chapters pave the way for more effective strategies aligning education, research, and service activities with community needs. These chapters highlight areas where institutions may have previously struggled to measure educational outcomes and societal impacts effectively.

Chapters 4 and 5 introduce a data-driven approach that provides institutions with a clear pathway to empirically evaluate their social accountability efforts. This methodology serves as a practical toolkit for institutions to identify societal needs and track outcomes and societal impacts of their graduates. This approach empowers institutions to begin to measure how their educational efforts translate into tangible improvements in population health. Policymakers, community stakeholders, administrative leadership and program directors can harness

reliable data to inform curricular reforms, resource allocation, and strategic planning. The structured methodology also empowers institutions to refine their educational inputs and processes for optimal outcomes and social impact. This method introduces a systematic way for institutions to track their impact over time, facilitate evidence-based decision-making, and inform quality improvements.

Furthermore, social accountability commences with the identification of community needs and concludes in meeting them.<sup>1</sup> Given the context-dependent nature of social accountability, this thesis provides a methodology for schools to identify their geographic regions, reinforcing the idea that the local community should and can serve as the level of analysis. This approach prompts institutions to tailor their educational initiatives to address specific challenges and disparities within specific geopolitical, socio-economic, and cultural context.<sup>2</sup> Advocating for the evaluation of social accountability at the institutional service region level, this thesis introduces a practical shift in how institutions measure impact. This shift promotes a more holistic understanding of the effect of educational efforts on local populations, fostering community-centric outcomes.

**Relevance.** The research presented in this thesis contributes to the scientific understanding of social accountability in health professions education and its potential implications for society. The scientific contributions and practical implications hold great promise for addressing societal health needs and promoting equitable and effective healthcare delivery aligned with societal needs.

From a scientific perspective, this thesis translates theoretical concepts into practical attributes, synthesizing prominent social accountability frameworks (Chapter 2), introduces a reliable survey tool (Chapter 3) and presents a methodological approach for utilizing population health data to identify regional health needs (Chapter 4), and establishes medical school service regions (Chapter 5).

On a societal level, the relevance of social accountability extends to its direct societal impact, involving the alignment of education, research, and service activities of health professions schools to address priority community needs. The ultimate aim of health professions education is to produce competent graduates prepared to address community needs.<sup>3-7</sup> Insights from Chapters 4 and 5 may continue to strengthen institutional commitments to the local community. These findings offer a practical approach for institutions to leverage publicly available data to begin to identify institutional service regions as well as the relevant regional health needs to begin to examine the extent to which educational inputs and processes impact population health. Additionally, the programmatic systems-in-evaluation approach proposed in Chapter 6 has the potential to shift the landscape of health professions education. This systematic approach may also influence accreditation standards, moving beyond superficial measures to examine the cumulative effect of various initiatives on the local community.

Overall, this thesis substantially advances the operationalization of social accountability in health professions education. The outcomes of this thesis provide insights into evaluating social accountability, offering a roadmap to begin to systematically evaluate the extent to which schools serve their local communities. These contributions hold great promise for addressing societal health needs and promoting equitable and effective healthcare delivery aligned to community needs.

**Target groups.** The insights and findings from this thesis are relevant to a wide audience including health professions educators, program directors, medical school administrators, policymakers, and community leaders. These findings offer actionable insights and tools to enhance educational processes and strategic decisions, aligning endeavors with priority community needs. For instance, policymakers may benefit from the insights and data-driven approach presented in Chapter 5 to better inform how medical graduates contribute to the national health workforce, identify physician specialty shortages, and geographic (mal)distributions.<sup>8-10</sup> These findings may also provide governments with valuable input regarding the allocation of health professions training seats within specific regions.

The insights from this thesis may also hold general relevance for quality enhancement efforts in other professional education programs, such as nursing, social work, dentistry, engineering, law, etc. For instance, the establishment of medical school service regions, presented in Chapter 5, has the potential to create community-centric outcomes. This methodological approach serves as a starting point for institution to begin to assess the extent to which they serve their local communities. These variations may encourage health professions schools to modify their educational inputs and processes to better address identified gaps and/or disparities. Furthermore, this thesis may also shed light on educational priorities and generate normative recommendations for enhancing admission processes related to equity, diversity, and inclusion. Lastly, these finding also have the potential to increase institutional social awareness of community needs, as well as graduate outcomes in terms of practice retention.

**Activities and Products.** The outcomes of this thesis have been widely disseminated, including publications in academic journals and presentations at various national and international scientific conferences across Canada, Europe, and the United States. Notably, Chapters 2 to 4 have been published in *Academic Medicine*, *Teaching and Learning in Medicine* (open-access), and *Advances in Health Science Education* (open-access), maximizing the potential to reach a large audience of researchers, educational scientist, and physicians. Additionally, Chapter 2 was discussed on KeyLIME (Key Literature in Medical Education) prominent podcast further enhances its exposure to a global audience.

Furthermore, the novel approach taken to identifying medical school service regions and the work on national graduate retention patterns (Chapter 5) attracted the attention of the Canadian Post-M.D. Education Registry (CAPER). This recognition led to an invitation to present this research during their annual spring committee meeting. CAPER is a national central data repository for all postgraduate medical residents, fellows and practicing physicians in Canada. This opportunity provided a platform to share insights with a diverse audience of education scientists, administrative leadership, regulatory bodies, and government agencies.

## References

1. Boelen C, Heck JE. Defining and Measuring the Social Accountability of Medical Schools. Geneva, Switzerland: World Health Organization; 1995. [http://whqlibdoc.who.int/hq/1995/WHO\\_HRH\\_95.7.pdf](http://whqlibdoc.who.int/hq/1995/WHO_HRH_95.7.pdf). Accessed July 15, 2020.
2. Gibbs, T. Sexy words but important curricula: Can social accountability be the change agent of the future. *Med Teach*. 2001;33(8);605-607.
3. Health Canada. Social Accountability: A Vision for Canadian Medical Schools. Ottawa, ON, Canada: Health Canada; 2001. [https://www.afmc.ca/future-of-medicaleducation-in-canada/medical-doctorproject/pdf/sa\\_vision\\_canadian\\_medical\\_schools\\_en.pdf](https://www.afmc.ca/future-of-medicaleducation-in-canada/medical-doctorproject/pdf/sa_vision_canadian_medical_schools_en.pdf). Accessed July 15, 2020.
4. Palsdottir B, Neusy AJ, Reed G. Building the evidence base: Networking innovative socially accountable medical education programs. *Educ Health (Abingdon)*. 2008;21:177.
5. Boelen C, Woollard B. Social accountability and accreditation: A new frontier for educational institutions. *Med Educ*. 2009;43:887–894.
6. Global Consensus for Social Accountability of Medical Schools. Global consensus for social accountability of medical schools. <http://healthsocialaccountability.org>. Published December 2010. Accessed July 15, 2020.
7. Larkins SL, Reston R, Marre MC, et al. Measuring social accountability in health professional education: Development and international pilot testing of an evaluation framework. *Med Teach*. 2013;35:32–45.
8. Eckhert NL. The global pipeline: too narrow, too wide or just right? *Med Educ*. 2002;36; 606-613. <https://doi.org/10.1046/j.1365-2923.2002.01257.x>
9. Rosenblatt RA, Hart LG. Physicians and rural America. *West J Med*. 2000;173(5):348–351
10. Dall T, Reynolds R, Jones K, Chakrabarti R, Iacobucci W. The Complexities of Physician Supply and Demand: Projections From 2017 to 2032. Association of American Medical Colleges (AAMC), Washington, DC. 2019.