



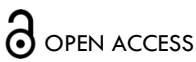
RESEARCH ARTICLE

Responsiveness to Societal Needs in Medical Education: Examining Context for Institutional Actions

Ingrid Philibert, PhD, MA, MBA¹, Danielle Blouin, MD, MHPE, PhD²

¹Senior Director, Accreditation, Measurement and Educational Scholarship
Frank H. Netter MD School of Medicine at
Quinnipiac University, North Haven, CT,
United States

²Professor, Faculty of Health Sciences
(Emergency Medicine), Director, MD Program
Evaluation, Queen's University, Kingston,
Ontario, Canada



PUBLISHED
31 July 2024

CITATION
Philibert, I., and Blouin, D., 2024.
Responsiveness to Societal Needs in Medical
Education: Examining Context for Institutional
Actions. *Medical Research Archives*, [online]
12(7).
<https://doi.org/10.18103/mra.v12i7.5679>

COPYRIGHT
© 2024 European Society of Medicine. This is
an open- access article distributed under the
terms of the Creative Commons Attribution
License, which permits unrestricted use,
distribution, and reproduction in any medium,
provided the original author and source are
credited.

DOI
<https://doi.org/10.18103/mra.v12i7.5679>

ISSN
2375-1924

ABSTRACT

Responsiveness to societal needs is an expectation for academic institutions (medical schools and teaching hospitals) that encompasses their three missions – education, research and service to patients and populations. This paper presents a scholarly perspective that proposes practical courses of action for academic institutions to operationalise calls by the World Health Organization and others for medical education institutions to demonstrate societal responsiveness. We offer a pragmatic framework for institutional action to guide societal responsiveness initiatives in all domains of an institution's academic mission. We point to the history of social accountability as a core role of academic institutions and how these early approaches provide a model for present-day actions and activities. We discuss the importance of engaging individuals and groups who benefit from institutional actions in the service of social accountability in co-determining optimal courses of action. We offer concrete recommendations in each domain of the academic mission to create a practical, institution-specific approach for societal responsiveness, shaped by the given organization's mission and its role in addressing education, health care and research needs at the level(s) (local, regional or national) at which it operates. We discuss the local, national and global contexts in which individual institutions operate and how they create facilitators and barriers for institutions seeking to meet social responsiveness mandates. We close with discussing how focusing on institution-level priorities for societal responsiveness allows for meaningful actions in a range of settings within an increasingly complex and challenging environment in many regions around the globe.

Social Accountability vs. Responsiveness to Societal Needs

In 1995, the World Health Organization (WHO) defined social accountability for medical schools as “the obligation to direct their education, research and service activities towards addressing the priority health concerns of the community, region, and/or nation they have a mandate to serve. The priority health concerns are to be identified jointly by governments, health care organizations, health professionals and the public.”¹ In 2010, the Global Consensus for Social Accountability of Medical Schools reaffirmed this definition and emphasised collaboration and evaluation of outcomes and impact:

“The 21st century presents medical schools with a different set of challenges: improving quality, equity, relevance and effectiveness in health care delivery; reducing the mismatch with societal priorities; redefining roles of health professionals and providing evidence of the impact on people’s health status.”²

The 2010 consensus statement resulted from profound deliberations on medical schools’ obligations to society, yet it does not offer specific guidance for individual institutions. We seek to fill this gap by presenting a scholarly perspective on possible courses of action by academic institutions in response to these calls for medical education institutions to demonstrate societal responsiveness. Our aim is to offer a pragmatic framework and specific recommendations for institutional action to guide societal responsiveness initiatives in the three domains of the academic mission (education, research and service to patients, populations and communities). Our discussion of the topic is informed by the history of social accountability as a core role of academic institutions and how these early approaches provide have served as models for present-day activities.

The standards of the World Federation of Medical Education (WFME), which recognizes medical education accrediting organizations across the globe, focus on educational quality, and awareness and adaptation to local contexts as attributes of societal responsiveness, and note these priorities should be reflected in accreditation and quality improvement.³ In many nations, governmental or accreditation standards for general (undergraduate) and post-graduate medical education, to the extent they exist, neither create binding obligations nor do they provide explicit guidance for institutional actions in the service of societal responsiveness. Absent that guidance, the term *social accountability* itself raises a question that merits further consideration: “accountable to whom and for what?” In one study from South Africa, although medical students and faculty understood social accountability as requiring action, most could not identify to whom a “socially accountable” entity should be answerable.⁴ The absence of guidance within medical education regulatory and accreditation frameworks in many nations around the globe creates challenges for institutional leaders in deciding on optimal courses of action.

In the 21st century, academic institutions, medical schools,

teaching hospitals and research enterprise have a range of accreditors, regulators and government and other bodies that evaluate and guide how institutions should operationalise social accountability. In 2020, we discussed the role of accreditation in promoting responsiveness to societal needs in post-graduate medical education, with a focus on existing accreditation standards and priorities related to the WHO definition of social accountability in medical education.⁵ In this perspective, we propose a pragmatic approach for individual institutions to demonstrate societal responsiveness in their three core academic missions: education, research and service to patients and populations, at various levels. We also discuss approaches to engage individuals and groups who stand to benefit from institutional societal responsiveness activities in co-determining courses of action.

Societal Responsiveness Related to the Education and Professional Formation of Physicians (Box 1)

The 2010 WHO Global Consensus noted that medical schools are the effectors of social accountability.² This concept is not new; early academic institutions implicitly integrated societal responsiveness into physician training. For example, between the 4th and the 12th Century in Persia and nearby regions, *bimaristans* (Persian for “location of disease”) were hospitals that provided patient care without charge and served as sites for physician education, often funded by a monarch in keeping with Islamic tenets of charity, service and learning.⁶ *Bimaristans* were similar in some roles and functions to modern academic institutions, and served as the model for teaching hospitals later established in Bologna, Paris, Oxford and other locations.⁷

Responsiveness to societal needs is an inherent component of current conceptualizations and definitions of physician professionalism. For example, the Canadian Medical Association’s Code of Ethics and Professionalism, through its commitment to justice, expects physicians “to promote the well-being of communities and populations by striving to improve health outcomes and access to care, reduce health inequities and disparities in care, and promote social accountability.”⁸ Across the global medical profession, cultural, moral and spiritual perspectives have informed local representations of professionalism in medical education and medical practice.⁹ Many mention service to others or similar concepts inherent to societal responsiveness.

In this perspective, we suggest a framework for activities in the academic domains of education, research and patient service to guide institutional efforts in their demonstration of societal responsiveness.⁵ Box 1 proposes a range of activities in the education mission; Box 2 and Box 3 suggest activities in the research and patient and community service missions, respectively. The list of possible activities is not exhaustive and should be viewed as a set of suggestions to stimulate further reflection, with a focus on the fit of particular activities with the institution’s mission and context.

Box 1: Responsiveness to Societal Needs in the Educational Mission

Admissions

1. Align admission policies and procedures with the institution's identified priorities for societal responsiveness in the educational mission.
2. Critically review admission criteria to integrate applicants' desired characteristics and experiences.
3. Design and implement outreach and pathway programs for potential applicants who meet the institution's priorities for societal responsiveness in the educational mission.
 - a. Ensure the dissemination of information about outreach/pathway programs and changes to admission criteria and processes to applicant populations relevant to the institution's societal responsiveness priorities.
4. Critically review admission criteria and procedures to remove application and admission biases.
 - a. Application Information: Integrate desired characteristics with regards to societal responsiveness.
 - b. Required application documents: Balance the added value of each required document vs. the difficulty to produce them for some groups of applicants.
 - c. Application reviewers: Assess for biases in the selection of reviewers.
 - d. Application scoring: Assess for biases in scoring systems and rubrics.

Curricula and Learning Environments

5. Align curriculum delivery with institutional priorities for societal responsiveness through experiential learning and placements in communities of interest because of their populations e.g., social conditions such as (homelessness), diagnoses (mental illness, HIV), locations (inner city urban, rural or remote), and in communities that are underserved for any reason (lack of local physicians, lack of tertiary care).
6. Select clinical and other learning experiences that reinforce curricular elements related to institutional priorities for societal responsiveness.
7. Review existing curricula including clinical experiences to reduce potential biases related to institutional efforts to be responsive to societal needs.
8. Invite members of communities relevant to institutional priorities for social responsiveness to participate in the design of curricula and learning experiences and in the process of defining and measuring learning outcomes.
9. Provide financial support and/or protected time for teaching faculty and staff engagement in committees and activities that reflect the institution's societal responsiveness priorities within the communities it serves.

Assessment

10. Build assessment systems that recognize and reward multiple dimensions of performance relevant to the care of patients and populations served by the institution.
11. Examine assessment tools and processes for biases against learners, with a focus on groups important to the institution's priorities for responsiveness to societal needs.

Teaching Faculty

13. Recruit or identify faculty with an expressed interest and expertise in areas the institution has identified as societal responsiveness priorities
14. Provide faculty development to educate and mentor teaching faculty about the institution's societal responsiveness goals and targets.
15. Appoint teaching faculty that represents the community served by the institution to provide positive role-models for learners, colleagues and others.
16. Identify and address potential biases in teaching faculty members' language and behaviors.

Societal Responsiveness in the Research Mission (Box 2)

For research programs, societal responsiveness entails choosing research topics related to local and regional societal needs. It also means engaging with groups and communities who stand to gain from the proposed research activities, including medically underserved communities, to make medical and health systems research more accessible, equitable, and responsive to societal needs.¹¹ Various forms of partnerships may be developed with communities including meaningful

engagement, co-development of research priorities, capacity-building, and addressing ethical concerns.¹² It has become an accepted and sought-after practice to co-develop research portfolios with members of relevant communities, to receive input from governing bodies, including community advisory boards, on institutional research activities¹³, to fund projects with a focus on local and regional health priorities, and consider the short- and longer-term impact of projects on pragmatic indicators related to the clinical, public health/community, economic and policy benefits of research.¹⁴

Box 2: Responsiveness to Societal Needs in the Research Mission

Research Faculty:

1. Recruit new and/or identify current research faculty with an expressed interest and expertise in research that addresses institutional societal needs priorities.
2. Educate research faculty about the institution's identified areas of societal responsiveness.
3. Mentor research faculty in areas related to the societal responsiveness priorities identified by the institution.
4. Align the development and support of areas of research expertise, research activities, and research teams with the institution's societal responsiveness.

Research Grants

5. Consider societal responsiveness priorities in institutional and research leaders' selections from among available extramural grants.
6. Develop institutional strategies to use institutional/internal grants to advance research related to the institution's societal responsiveness priorities.

Research Environment

7. Review and align institutional research support (staff, mentoring, equipment) with the institution's societal responsiveness priorities.
8. Include societal responsiveness priorities in the allocation of protected time for investigators/research faculty.
9. Provide financial support and/or protected time for research faculty engagement in committees and activities that reflect the institution's societal responsiveness within the community it serves.

Societal Responsiveness in the Patient and Community Service Mission (Box 3)

Dr. Charles Boelen, a pioneer in advancing the concept of social accountability in medical education, offers guidance on courses of action relevant to societal responsiveness in the service domain: "Quality in health care is a person-centred care implying that interventions are most relevant and coordinated to serve the comprehensive needs of a

patient or a citizen. Equity implies that each person in a given society is given opportunities to benefit from essential health services. Relevance is present when priority is given to most prevalent and pressing health concerns and to most vulnerable individuals and groups in society. Effectiveness is achieved when the best use is made of available resources to the benefit of both individuals and the general population."¹⁵

Box 3: Responsiveness to Societal Needs in the Service to Patients and Populations Mission

Clinical Faculty

1. Recruit and select clinical faculty members with an expressed interest and/or expertise in areas identified as societal needs.
2. Mentor clinicians in the aspects of the institution's societal responsiveness priorities related to the care of patients, populations and communities.

Clinical Services and Clinician Expertise

3. Consider societal responsiveness in all aspects of the service mission and for all communities (local, regional, national or global, if pertinent) served by the institution.
4. Align the development and support of areas of clinical care expertise, clinical activities, and clinical teams related to the institution's societal responsiveness priorities.

Service Environment

5. Provide financial support and/or protected time for faculty and staff engagement in patient and community service committees and activities that reflect the societal responsiveness priorities for the communities the institution serves.

Engagement of Individuals and Groups Who Stand to Benefit (Box 4)

A review of studies of societal accountability frameworks in medical education with a focus on implementation and program evaluation using the context-input-process-product (CIPP) model, highlighted the relevance of community engagement in all domains of model, including community partnerships (Context); use of community health profiles (Input); community-based clinical training opportunities and learning exposures (Input); planning physician resources with community partners (Process); implementing quality assurance, program evaluation and

accreditation (Process); and measuring impacts (Overall improvement in community health outcomes, reduction/prevention of health risks, morbidity/mortality of community diseases (Product)).¹⁶ Involving local communities and invested parties (those who are affected by or stand to benefit from actions) as partners is critical in defining medical schools' societal responsiveness in all areas of the academic mission. This aligns with the declaration from the 2017 World Summit on Social Accountability that societal responsiveness for educational institutions "must give special emphasis to populations in the greatest need, while recognising the undeniable strengths within these communities."¹⁷

Box 4: In All Areas of the Academic Mission

1. Engage representatives from groups who stand to benefit in the institution's reflections and actions related to societal responsiveness in all areas of the academic mission.
 - a. In selecting priorities for social responsiveness in the education mission, collect input from communities who may have been minoritized or marginalized in admissions and after matriculating into the educational program.
2. Examine institutional policies and procedures to ensure they reflect the institution's priorities for societal responsiveness in all areas of the academic mission.
3. Ensure faculty contributions related to societal responsiveness in all areas of the academic mission are recognized in faculty promotion and tenure processes.
4. Include markers of societal responsiveness in the institution's evaluation of its education, research and patient care and population health missions, and monitor progress on implementation and outcomes/impact.
 - a. In selecting metrics and outcomes for all areas of the academic mission include representatives from groups who stand to benefit.

Efforts Across the Three Dimensions of the Academic Mission

Within institutions, programs addressing societal responsiveness are often intertwined across the three missions. A recent analysis highlighted five themes contributing to the connectedness among the three academic missions: 1) shared vision and strategies, 2) institutional strategies aligned with community needs, 3) coproduction of knowledge; 4) institutional unifying set of concepts spanning all missions; and 5) tensions related to the economic drivers of the three missions.¹⁸ Strategies included innovation in education (new competencies and instructional methods, recruitment); new research agendas with developing partnerships and operations; and new delivery models with a focus on patient needs, value-based care and well-being).¹⁸

Successes and the State of Scholarship

Nearly 30 years after the first mention of social accountability in 1995 and 14 years after the WHO declaration, published reports of successful institutional efforts in the realm of responsiveness to societal needs are still scarce. A few studies originate from institutions designed with societal responsiveness as an integral part of the academic mission. An example is the Northern Ontario School of Medicine in Canada, established in 2006 to respond to the societal needs of Northern local populations; this orientation has permeated through student selection, curricula, instructional methods and immersion experiences, policies and outreach activities, all co-developed with local constituencies.¹⁹ The School has monitored and reported on its social responsiveness indicators and its social accountability impact on the region.²⁰ Additional reports come from schools within The Training for Health Equity Network (THEnet), a community of practice comprising 13 schools from high- and low-income countries with a commitment to social accountability in medical and health professions education.²¹ Many member schools are located in rural or underserved communities and all recruit students from underrepresented and underserved populations. Published outcomes show success in producing a workforce with an intention to care for underserved populations in the region.²²

Our examination of the literature found recommendations, perspectives and a few descriptions of programs, though published research on the impact of social accountability and societal responsiveness is limited. To demonstrate impact, it is important for institutional leaders to identify expected outcomes and metrics and to monitor progress in all areas of the academic mission. For the education mission, WHO guidance and outcomes for competency-based medical education may help define targets. This may include graduates demonstrating competency in caring for

patients with a variety of diagnoses and conditions. Indicators at the systems-level could include access to care, cost-effectiveness, population health indicators, and the scope of practice and practice locations for physician graduates.^{5,22}

While we focused on recommendations for individual academic institutions, we acknowledge that societal responsiveness on a larger scale will require scaling-up these efforts to regional or national levels. The World Health Organization's (WHO)'s defined scale-up as "deliberate efforts to increase the impact of successfully tested health innovations so as to benefit more people and to foster policy and programme development on a lasting basis."²³ The efforts of individual academic institutions in settings across the globe could serve as demonstration projects for these larger efforts. This may have added beneficial impact in regions that need to develop their health care systems, as a systematic review efforts to scale up public health interventions found many studies reports from low- and middle-income countries (LMICs), while research in high-income countries (HICs) was more limited.²⁴

Conclusions

We offered a scholarly perspective on how expectations for societal responsiveness can be operationalized by individual academic institutions. Our work has limitations. While we solicited input from Europe and the Middle East and provided global references, our understanding of academic institution reflects the authors' North American viewpoints and we cannot state how this may map to expectations for social accountability and responsiveness to societal needs in other high-income, or low- and middle-income countries.

One aim of our work is to contribute to the academic dialogue about academic institutions' societal responsiveness. A 2017 thematic issue of *MedEdPublish* commented on medical education occurring in difficult circumstances, including low resource settings, regional conflicts and environmental disasters.²⁵ The global outlook for physician education in 2024 appears even more challenging, creating added impetus to focus on societal responsiveness. We hope our suggestions are helpful to academic institutions in considering and implementing societal responsiveness across their academic missions with the aim of enhancing health and reducing human suffering in the individuals and populations they serve.

Acknowledgment

The authors thank Halah Ibrahim, MD and Sawsan Abdel-Razig, MD, United Arab Emirates, Eckhart Hahn, MD, Germany, and Lyuba Konopasek, MD, USA, for their helpful suggestions on this perspective.

References

1. Boelen C, Heck JE. *Division of development of human resources for health, World Health Organization. Defining and measuring the social accountability of medical schools. WHO/HRH/95.7.* Geneva: World Health Organization; 1995. p. 3.
2. Global Consensus for Social Accountability of Medical Schools, 2010, available at [11-06-07-GCSA-English-pdf-style.pdf \(ubc.ca\)](#), accessed May 4, 2024.
3. World Federation for Medical Education, Standards, [WFME Standards - World Federation for Medical Education](#), accessed May 4, 2024.
4. Clithero-Eridon A, Albright D, Ross A. Conceptualising social accountability as an attribute of medical education. *Afr J Prim Health Care Fam Med.* 2020 Feb 18;12(1):e1-e8.
5. Philibert I, Blouin D. Responsiveness to societal needs in postgraduate medical education: the role of accreditation. *BMC Med Educ.* 2020 Sep 28;20(Suppl 1):309.
6. Miller AC. Jundi-Shapur, bimaristans, and the rise of academic medical centres. *J R Soc Med.* 2006 Dec;99(12):615-7. Erratum in: *J R Soc Med.* 2007 Feb;100(2):69.
7. Modanlou HD. Historical evidence for the origin of teaching hospital, medical school and the rise of academic medicine. *J Perinatol.* 2011 Apr;31(4):236-9. Epub 2011 Jan 13.
8. Canadian Medical Association code of ethics and professionalism, December 2018; CMA code of ethics and professionalism - CMA PolicyBase - Canadian Medical Association, accessed April 13, 2024.
9. Abdel-Razig S, Ibrahim H, Alameri H et al. Creating a Framework for Medical Professionalism: An Initial Consensus Statement from an Arab Nation. *J Grad Med Educ.* 2016 May;8(2):165-72.
10. Committee on Accreditation of Canadian Medical Schools [CACMS-Standards-and-Elements-AY-2023-2024.pdf \(cacms-cafmc.ca\)](#), accessed May 4, 2024.
11. Goold SD, Myers CD, Danis M et al. Members of Minority and Underserved Communities Set Priorities for Health Research. *Milbank Q.* 2018 Dec;96(4):675-705.
12. Hoekstra F, Mrklas KJ, Khan M et al. SCI Guiding Principles Consensus Panel; Gainforth HL. A review of reviews on principles, strategies, outcomes and impacts of research partnerships approaches: a first step in synthesising the research partnership literature. *Health Res Policy Syst.* 2020 May 25;18(1):51.
13. Philibert I, Fletcher A, Poppert Cordts KM, Rizzo M. Evaluating governance in a clinical and translational research organization. *J Clin Transl Sci.* 2024 Feb 13;8(1):e42.
14. Clinical and Translational Science Benefits Mode. [Case Study Builder - Tool - Translational Science Benefits Model \(wustl.edu\)](#); Accessed April 13, 2024.
15. Boelen C, Woollard R. Social accountability: the extra leap to excellence for educational institutions. *Med Teach.* 2011;33(8):614-9.
16. Barber C, van der Vleuten C, Leppink J, Chahine S. Social Accountability Frameworks and Their Implications for Medical Education and Program Evaluation: A Narrative Review. *Acad Med.* 2020 Dec;95(12):1945-1954.
17. World Summit on Social Accountability. The Network: Towards Unity for Health (TUFH). April 8-12, 2017; <http://www.thenetworktufh.org/2017conference>; accessed April 12, 2024.
18. Gonzalo JD, Dekhtyar M, Caverzagie KJ et al. The triple helix of clinical, research, and education missions in academic health centers: A qualitative study of diverse stakeholder perspectives. *Learn Health Syst.* 2020 Oct 17;5(4):e10250.
19. Wood B, Bohonis H, Ross B, Cameron E. Comparing and using prominent social accountability frameworks in medical education: moving from theory to implementation in Northern Ontario, Canada. *Can Med Educ J.* 2022 Sep 1;13(5):45-68.
20. Larkins S, Preston R, Matte MC, Matte IC, Lindemann R, Samson FD. Measuring social accountability in health professional education: development and international pilot testing of an evaluation framework. *Medical Teacher* 2013; **35**(1): 32-45.
21. Larkins S, Johnston K, Hogenbirk JC et al. Practice intentions at entry to and exit from medical schools aspiring to social accountability: findings from the Training for Health Equity Network Graduate Outcome Study. *BMC Med Educ.* 2018 Nov 13;18(1):261.
22. Bandiera G, Frank J, Scheele F, Karpinski J, Philibert I. Effective accreditation in postgraduate medical education: from process to outcomes and back. *BMC Med Educ.* 2020 Sep 28;20(Suppl 1):307.
23. ExpandNet, WHO (World Health Organ.). 2010. Nine steps for developing a scaling-up strategy. [Nine steps for developing a scaling-up strategy \(who.int\)](#), Accessed July 1, 2024.
24. Leeman J, Boisson A, Go V. Scaling Up Public Health Interventions: Engaging Partners Across Multiple Levels. *Annu Rev Public Health.* 2022 Apr 5;43:155-171. Epub 2021 Nov 1.
25. McLean M, McKimm J, Gibbs T. Medical education in difficult circumstances: A global responsibility to contribute. *Med Teach.* 2017 Jan;39(1):4-6. Epub 2016 Dec 9.