



1 Health Disparities, Social Accountability and Postgraduate Medical Education

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Executive Summary

This paper is one of 24 papers commissioned for the Future of Medical Education in Canada Postgraduate (FMEC PG) Project. It establishes the context of health disparities in Canada and explores the role of postgraduate medical education (PGME) in identifying and addressing health disparities as a response to the social accountability mandate of medical schools. Through a targeted review of the published and 'grey' literature we identify current practices in Canadian PGME that support this mission at the strategic, organizational level and those at the curricular level with specific reference to the CanMEDS roles. We identify some inconsistencies and gaps in current practice and present potential avenues through which these gaps may be addressed.

Health disparities exist in Canada reflecting the unequal distribution of the many determinants of health. This includes disparities within the health care system, specifically access to care and quality of care. The institutions that govern, accredit and deliver PGME have a role to play in addressing health disparities not only by preparing the next generation of physicians but also by providing leadership on a socially responsible agenda that is transparent, linked to organizational activities and publically reported. There are examples of the social accountability mandate of medical schools and their accrediting organizations being recognized and used to address health disparities in the context of PGME; however, this literature is isolated and limited in scope. Three themes emerged that can form the basis of discussion for the future of postgraduate medical education in Canada:

1. Strategic process and accreditation. While we found a number of exemplary programs responding to priority health concerns of the community, the success of these projects appears to rely on individual interest and informal collaboration rather than on a systematic, concerted approach. We have been unable to find any documents or published literature that describe a systematic process by which health disparities are identified, characterized, and addressed by any of the organizations responsible for overseeing PGME. PGME leadership may wish to consider the powerful role that accreditation can play in supporting both the social accountability mandate of residency programs within medical schools and the development of systems and programs that address health disparities.
2. Health advocacy. At the trainee level, the CanMEDS Health Advocate role appears best positioned to directly respond to the social accountability imperative within medical schools. The practice-based learning environment of PGME can provide opportunities for trainees to learn health advocacy by active participation in the care of vulnerable, marginalized and underserved populations; however, it is important to consider that relying on teaching the health advocate role alone, rather than embedding social responsibility in all aspects of a trainee's work, could limit the development of social accountability within the profession.
3. Physician maldistribution. While physician maldistribution is a complex problem, PGME can play a role by exposing the hidden curriculum that demeans primary and generalist careers and by considering policy directed at the type and geographical setting of both primary care and generalist specialty programs

Introduction

Disparities in health outcomes exist between and within nations. Health inequalities within countries, regions, and communities often reflect systemic limitations for those vulnerable members of society. In Canada, poor health outcomes at the national level are disproportionately associated with specific populations: people of Aboriginal ancestry, people living in rural and remote communities, and people in the lowest socioeconomic stratum. Additional disparities exist at the regional and community level, reflecting local circumstances. There is evidence at the international scale that increasing disparities in wealth between the top and bottom segments of the population are associated with decreasing population health status using traditional indicators. Thus, the responsibility for the medical profession to address these disparities has both a social justice and a very practical motivation.

The social accountability mandate of medical schools, originally put forward by the World Health Organization, has been endorsed by the Association of Faculties of Medicine of Canada (AFMC), which represents all 17 Canadian faculties of medicine. It states that medical schools have an “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, 2). At the intersection of training and practice, PGME falls within the purview of faculties of medicine while also being embedded within health authorities and communities. PGME, therefore, has a role to play in addressing health inequalities through embracing the social accountability mandate of medical schools.

This paper explores the role of PGME in identifying and addressing health inequalities as a response to the social accountability mandate of medical schools.

Background

Health disparities, inequalities, and inequities

The health status of individuals and populations is determined by a range of personal, social, economic and environmental factors including: income and social status, education, employment and working conditions, social and physical environments, personal health behaviours, culture, availability and access to health services and biology, and genetic endowment(3). The unequal distribution of these determinants and their consequent health outcomes are known as health disparities or health inequalities. Health disparities have a human cost, posing a burden on individuals and communities, and also are significant drivers of health system costs. Some of these disparities in health outcomes are unavoidable and predictable, reflecting the influence of age, biology, and personal choice(4). Others reflect systemic disadvantage that may result in low health literacy^a and predispose individuals to poor health outcomes.

Those disparities that reflect injustice or systemic discrimination towards vulnerable or marginalized groups with little control over their circumstances are known as health inequities. Often used erroneously as a synonym for health disparities, health inequities refer to differences in opportunity and, therefore, may be viewed as modifiable or preventable (4, 5). For the

^aAccording to the World Health Organization, health literacy represents the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health (World Health Organization (2009) Track 2: Health literacy and health behavior. 7th Global Conference on Health Promotion, Nairobi, Kenya. Available from: <http://www.who.int/healthpromotion/conferences/7gchp/track2/en/index.html> Accessed 6 February 2011.

purposes of this review, we will use the term health disparities rather than health inequities. While health inequities are worthy of sustained discussion, it is not our purpose in this paper to debate the relative fairness of health outcomes.

Health disparities in Canada

While health status and life expectancy in Canada are among the best in the world, there are differences within the Canadian population. Disparities in health outcomes exist over a vast array of risk factors and health behaviours. These differences are not randomly distributed; they disproportionately affect specific groups. They vary by community, by region, by population, and over time. At the national level, geographic location, socioeconomic status, and Aboriginal status are the principal factors currently associated with health disparities. For example, life expectancy for First Nations males is seven years less than the Canadian average. For females, the gap is five years (6). Rates of diabetes for First Nations, Inuit and Métis are three to five times higher than the national average (7). Rates of smoking and obesity are higher in rural areas than in urban areas, and rural residents are more isolated and have restricted access to health services and providers. There is a higher overall mortality risk among rural residents, driven by factors such as circulatory diseases, injury, and suicide (8).

Disparities in health outcomes persist among lower socio-economic groups despite their higher overall use of health services (6). Given that individuals in the lowest income quintile are more often and more severely sick or injured, they use approximately twice as much in the way of health care services as those in the highest quintile. This disparity exists not simply between the lowest and highest quintile of income, but rather there is a gradient of risks factors and incidence of disease across each step of the income quintile (6). Social gradient in health is not unique to Canada, but a phenomenon observed in most Western countries, typified by the Whitehall studies of the United Kingdom in the 1970s (9, 10).

Disparities in the health system

While health disparities are most often framed in terms of the health outcomes or behaviours of populations, disparities in the health system contribute to overall health status. Access to care and quality of care are the primary indicators of disparities in the health system(11). Access to care is a particularly salient issue in northern and rural Canadian communities, where the effects of the maldistribution of health care professionals and resource limitations are most keenly felt. The Romanow Commission identifies this inverse care law (12), a term first coined by Tudor Hart in 1971 (13), noting that in spite of their poorer health status and increased need for primary health care, individuals in rural communities remain underserved and have greater difficulty accessing health services than their urban counterparts.

Based on 2004 data, Pong & Pitblado report that while 21.1% of the Canadian population live in rural and remote areas, only 16% of family physicians and 2.4% of specialists practice in those communities (14). Rural patients are thus obliged to make tradeoffs in order to have their health care needs met, balancing the desire for specialty care with the out-of-pocket expenses and safety concerns associated with travelling, often great distances, to acquire these services (15). The dearth of rural specialists often means that rural family physicians and general practitioners have a broader scope of practice (14, 16, 17), carry a heavier workload and assume a higher level of clinical responsibility than their urban counterparts (16, 17). For instance, while 74% of rural family doctors work in emergency departments, only 15% of family physicians practicing in metropolitan areas do so (14). Rural specialists, too, require a broader scope of practice (see commissioned paper 1.2: Primary care generalism and specialization issues in Postgraduate Medical Education). The substantial difference in the character of urban and rural practice

creates significant barriers to the recruitment and retention of physicians in rural and remote communities.

Social accountability and PGME

As the vehicle for preparing physicians for practice, PGME has a role to play in addressing the problem of health disparities in Canada. PGME's responsibility to address health disparities is articulated in the social accountability mandate of medical schools(1), specifically "...a knowledge and engagement with marginalized and vulnerable individuals and communities who will need unique strategies in order to facilitate accessibility to health care." (2) The Health Canada document Social Accountability: A vision for Canadian Medical Schools specifically refers to participation by postgraduate education in determining the right number and mix of physicians and a responsibility to ensure that future practitioners are equipped to incorporate health promotion and disease prevention (2). This position was further enhanced and clarified by the Future of Medical Education in Canada (FMEC) MD Project of the AFMC:

Social responsibility and accountability are core values underpinning the roles of Canadian physicians and Faculties of Medicine. This commitment means that, both individually and collectively, physicians and faculties must respond to the diverse needs of individuals and communities throughout Canada, as well as meet international responsibilities to the global community. (Recommendation #1) (18)

In order to clarify the meaning of a term central to this discussion, we will elaborate on the concept of "social accountability". Accountability implies the adoption of measures to ensure that a socially responsible course of action is followed. This might take the form of communication with stakeholders about the progress of mutually conceived projects, or the creation of a system of checks and balances against which progress can be measured. To be accountable is to be answerable for one's actions (or inaction). Importantly, this extends beyond the notion of social *responsibility*, in which there is an implied commitment to respond to societal needs, but not an explicit accountability. By extension, it is equally important to clarify what is meant by social (or society) when discussing social accountability. As Boelen suggests, this might represent a community, a region and/or a nation(19). In the context of PGME, the boundaries of the "society" to which it is responsible likely exist at a variety of levels. For example, the entirety of Canadian PGME could reasonably be held accountable to all Canadians, whereas individual PGME programs have narrower, and often ill-defined, limits. These definitions, although preliminary, help to frame much of the research described in review.

Although the complex postgraduate context creates challenges to consultation, collaboration, and coordination, the imperative to respond to social needs has been recognized by faculties of medicine and by the postgraduate accrediting bodies, the Royal College of Physicians and Surgeons of Canada (RCPSC) and the College of Family Physicians of Canada (CFPC). Both the CFPC and the RCPSC identify within their respective mandates the goal of improving the health of Canadians through medical education and practice. In its strategic plan, Focus 2020, the RCPSC places a priority on addressing the health needs of society, including vulnerable and disadvantaged populations, in order to enhance the quality of health care provided to Canadians, while the CFPC specifically espouses championing "quality health care for all people in Canada" (20).

Methods

To identify literature that examines how health inequalities and disparities are addressed in postgraduate medical programs in Canadian faculties of medicine, we searched MEDLINE and

EMBASE for articles which make reference to Canadian PGME (postgraduate medical education or “internship and residency”) in combination with health status disparities, health inequities, health disparities and/or health care disparities. We also conducted database searches for articles which included reference to Canadian PGME and keywords related to social accountability and keywords related to access to care and population/public health. The detailed search strategies appear in Appendix 3. Articles were selected for review based on their abstracts. A hand search of websites related to PGME health status and health human resources identified reports, publications and other sources of information to augment the published literature for each aspect of the review as appropriate. These included faculties of medicine, RCPSC, CPFC, Canadian Post-M.D. Education Registry (CAPER), Canadian Resident Matching Service, (CaRMS), Association of Faculties of Medicine of Canada (AFMC), American Association of Medical Colleges (AAMC), International Conference on Residency Education (ICRE), Statistics Canada, Canadian Institute for Health Information (CIHI), Health Canada Health Human Resources, International Medical Workforce Collaborative (IMWC), and Society of Rural Physicians of Canada (SRPC). In addition, conference proceedings were explored for content related to health inequities and disparities, as well as for projects and programs in health advocacy. Hand searching of reference lists, personal libraries and grey literature reports expanded the available literature for review.

Results

Based on our review of the Canadian literature, we were unable to find any documents or published literature that describe a systematic process by which health disparities are identified and characterized by any of the organizations responsible for overseeing PGME. However, there is an impressive body of evidence that medical schools are answering the call for greater accountability to society. Our search did reveal a number of projects that seek to involve community groups in the identification of health disparities. These are initiated at the level of national PGME organizations, universities, postgraduate programs and individual physicians and interest groups as well as among collaborative networks. The AFMC website maintains a searchable database of social accountability initiatives (21). The success of these projects in addressing specific health disparities appears to rely on individual interest and informal collaboration rather than on a systematic, concerted approach.

We have selected a series of exemplary initiatives to illustrate the response to current health disparities within PGME at the level of accrediting bodies, universities, programs and individuals (trainees and faculty).

Accrediting bodies

In an initiative that has had a widespread international impact, the RCPSC engaged broadly with the community to develop the Canadian Medical Education Directives for Specialists (CanMEDS) framework building upon the work of “Educating Future Physicians for Ontario”(22-24). Nearly twenty years old, the CanMEDS project was itself a response to calls for greater social accountability among medical practitioners. The competency framework articulated in CanMEDS has been celebrated for its consideration of several non-cognitive aspects of medical practice, and has been applied to PGME programs across Canada and beyond(25).

The CFPC has long advocated for the practice of medicine that is both socially responsible and accountable. As an example, the four principles of family medicine specify that “family medicine is a community-based discipline” and that “the family practitioner is a resource to a defined practice population”. Currently the CFPC is aligning its principles with the CanMEDS roles in CanMEDS-FM.

University-Level PGME Initiatives Addressing Health Disparities

A notable example of social responsiveness and longitudinal accountability, the Northern Ontario School of Medicine (NOSM), was created in 2002, after a long period of community consultation, and shortly after the publication of *Social Accountability: A Vision for Canadian Medical Schools*. The Government of Ontario established the new medical school "...with a social accountability mandate to contribute to improving the health of the peoples and communities of Northern Ontario." (26) At NOSM, clinical education is embedded within the community following the distributed community engaged learning (DCEL) model, characterized by ongoing engagement with community stakeholders. The school currently offers postgraduate programs in family medicine and seven other general specialties, as well as multiple Family Medicine PGY-3 training options, including Emergency Medicine, Anesthesia, Enhanced Skills Maternity Care, Care of the Elderly and Self-Directed Enhanced Skills (27).

Program-level PGME initiatives addressing health disparities

i) Aboriginal Health

Health disparities affecting the aboriginal population are among the most striking health disparities in Canada. As highlighted above, these include access to care, chronic disease management, and mental health issues. PGME has begun to play an important role in addressing these concerns over the past two to three decades.

In their 1999 survey of Canadian postgraduate Family Medicine program directors, Redwood-Campbell *et al.* described the state of Aboriginal health education for family practice residents(28). At that time, only one of the country's 18 training programs had formal written objectives for curricula relating to Aboriginal health. Despite this, however, the authors identified that 16 of 18 programs offered "elective experiences in Aboriginal health".

Although no such study has been repeated in the past decade, there is evidence that access to training and exposure to Aboriginal health issues have increased dramatically since 1999. A review of Family Medicine program websites, as well as descriptions available through CaRMS, confirm this trend. Aboriginal Health Education has taken on a variety of forms, ranging from the establishment of third-year enhanced skills programs (e.g., Queen's University (29)) and the creation of Aboriginal training sites (e.g., UBC (30)). In a collaborative endeavor, the Indigenous Physicians Association of Canada and the RCPSC have worked together to develop frameworks to describe core competencies in First Nations, Inuit and Métis health for postgraduate and continuing medical education programs (31).

The development and implementation of the third-year enhanced skills program in Aboriginal Health at Queen's University in the 1990's illustrates a systematic approach to the identification of a set of health disparities (in this case, related to Aboriginal health) and the subsequent response, which includes the engagement of community stakeholders in a longitudinal process of decision-making and program implementation. In response to the recognition of a greater need for training in Aboriginal health, a draft of the program description was submitted to the National Native Physicians Association. The initiative is based on the belief that "[both] the health care service to Aboriginal communities and the medical/cultural education of residents will be enhanced by a consultation group chaired by the program coordinator, and consisting of Aboriginal representatives from appropriate groups." (29) The program seeks to provide residents with a sense of the historical context of Aboriginal health concerns, allowing them to respond more appropriately to those concerns.

ii) Inner City Health

Marginalized groups living within Canada's inner cities represent another important population whose health outcomes are characterized by significant disparities relative to the population at large. There is a superficial understanding of the complexity of the social issues at play, including the intermingling of poverty, mental illness and substance abuse, and, as a result, the delivery of appropriate care is a challenge.

Within the Department of Emergency Medicine at the University of Toronto, the Inner City Health research program has been created in an effort to investigate these health concerns. Researchers in this recently established group have begun to ask important questions about the experiences of marginalized populations in their interactions with the health care system while also exploring trainee's attitudes towards the homeless who present to the Emergency Department. They have also established collaborations with the Suicide Studies unit at St. Michael's Hospital, where the Psychiatry department takes an active interest in issues of inner city health (32, 33). In publishing the results of their work, the Inner City Health research group fulfills its social accountability mandate – the results help to shed light on important issues relating to the care of marginalized groups, and have the potential to significantly improve their health care interactions

An examination of PGME beyond Canadian borders identifies a wealth of experience in building programs to address the health disparities associated with inner city groups. Inner city family medicine residency programs developed in the United States as an outgrowth of community-oriented primary care (COPC) (34). The Montefiore Family Health Center serves as an example. Situated within a multicultural urban community in the Bronx, the center runs a residency training program in Primary Care and Social Internal Medicine, with specific tracks in Family Practice, Internal Medicine and Pediatrics. In addition to fostering the development of core skills within each training track, the program seeks to build community health skills allowing trainees to assess health care as a system, rather than as a series of disjointed solitudes. (34, 35) A combined Family Medicine/Community Medicine residency program is available in at least two Canadian universities (36).

iii) Rural and Northern Health

Rural and northern populations are particularly vulnerable as disparities in health outcomes are exacerbated by limited access to physicians and health services. Acute medical workforce shortages in rural and remote communities, long distances, and challenges in transportation contribute to poor health outcomes.

One approach to tackling the issue of physician maldistribution is to ensure that students and residents have experiences in rural and remote settings, as evidence suggests that medical students from rural communities and students trained in rural communities are more likely to practice in rural areas (17, 37, 38). Following a 1999 review of rural Family Medicine, the CFPC has required eight weeks of training for all residents in family medicine (39, 40). Many universities have instituted specific rural streams of family medicine training (see commissioned paper 2.5: Distributed Postgraduate Medical Education). As well as immersing residents in a milieu of full service family practice, these training programs also provide experiences in dealing with marginalized rural populations, including aboriginal populations.

Trainee-level PGME initiatives addressing health disparities

The CanMEDS Health Advocate role encompasses a broad range of competencies associated with health disparities and determinants of health specifically:

- respond to individual patient health needs and issues as part of patient care;
- respond to the health needs of the communities that they serve;
- identify the determinants of health of the population that they serve; and
- promote the health of individual patients, communities and populations. (25)

As Health Advocates, physicians are expected to recognize determinants of health and act on behalf of individual patients, communities, and society in order to address them (25). While the Health Advocate is the only role which explicitly addresses health disparities; other CanMEDS competencies are required to meet this objective. Medical experts must be able to communicate and collaborate with individuals and groups, including those with low health literacy. Readers are referred to two papers in this series: commissioned paper 4.1: Integration of CanMEDS Expectations and Outcomes provides a more thorough discussion of the teaching and evaluation of CanMEDS roles and commissioned paper 1.4: Training Residents to Address the Needs of a Socially Diverse Population reviews socio-cultural diversity training in PGME.

The CanMEDS Health Advocate role has been difficult to integrate into postgraduate training, and is perceived by residents to be less important than other CanMEDS roles (41). Teaching and evaluating the Health Advocate role is specialty and context specific and the responsibility of each postgraduate training program. The RCPSC's Train-the-Trainer manual for the Health Advocate encourages educators to develop a curricular framework that addresses the Health Advocate competencies across the duration of the training program and to specify the behaviours of both an effective and an ineffective Health Advocate in order to establish concrete performance expectations around the role (42). While educators are encouraged to use multiple teaching and evaluation methods, the sharing of their best practices is limited (42).

One of the main challenges in teaching and evaluating the role may be nebulous expectations for health advocacy in daily practice. Residents in a variety of specialties report feeling inadequately prepared for the Health Advocate role and rarely engaging in advocacy activities (43-45). In a study by Verma and colleagues, both residents and faculty members identified a need for greater clarity in the definition of the Health Advocate and in the expectations at each level of training (41). Oandasan similarly identified a dual perception that advocacy is either a daily activity in which physicians engage simply by virtue of being part of a helping profession or that it is above and beyond the call of duty and, therefore, left to a few individual physicians (46).

Underlying and supporting the competencies of the Health Advocate is knowledge of population and public health. Effective engagement of these competencies requires basic skills in epidemiology and theories of health promotion and disease prevention. The literature points to an institutional devaluing of population and public health skills at the MD undergraduate level, both in terms of the hidden curriculum and in terms of opportunities for role modeling and exposure to environments where these skills can be highlighted (47). Strategies to introduce these skills at the MD undergraduate level have been suggested the FMECMD project and the AFMC Public Health Educators Network (48).

In spite of increased efforts in undergraduate medical training, there is scanty evidence of population health instruction in Canadian postgraduate education. A recent paper by Sohi and colleagues describes a health advocacy curriculum in internal medicine at the University of British Columbia(49). The team describes a flexible resident-driven curriculum incorporating

health promotion and disease prevention while engaging community resources. Dharamsi and colleagues, also at the University of British Columbia, have published a guide for educators discussing social determinants of health and linking those examples to advocacy activities(50). In the American context, the Montefiore program (described above) provides an example of training in population health competencies.

Discussion and Emerging Themes for the Future of Postgraduate Medical Education

There is very limited literature – either in peer reviewed publications, grey literature or other publically accessible documents – on the subject of health disparities and social accountability in postgraduate medical education. Despite the widespread adoption of the WHO framework, the present literature review reveals some lack of clarity in the use of the term *social accountability*. This ambiguity becomes apparent when attempting to operationalize social accountability into the organizational structures and practices of PGME. Organizations need to be clear, in each instance, if they mean social responsibility (the value) or social accountability (actions and accounting for those actions). If the latter, they need to be clear to whom they will be accountable, what the scope of the accountability is and how it will be demonstrated for that particular program, project or venture.

The current review focused primarily on several of the most prominent health disparities that currently exist in Canada. However, health disparities are dynamic: they vary by region, by population, and over time. It is, therefore, essential to ensure that physicians are trained to identify and respond to health disparities as they change over time and place, rather than relying on a static definition. This is also true at an organizational level, as articulated by the Social Accountability Steering Group, that “Medical schools respond to the changing needs of the community by developing formal mechanisms to maintain awareness of these needs and advocate for them to be met.” (2)

In the current review, four themes emerged that can form the basis of discussion for the future of postgraduate medical education in Canada: **strategic process, physician maldistribution, accreditation, and health advocacy**. Only one, health advocacy, is directed specifically at trainees. The others relate to the purpose, organization and delivery of PGME and are directed at the educational leadership. In the following section we will address each of these themes independently.

Strategic process for social accountability

As described in the WHO statement on the social accountability of medical schools, priority health concerns are to be “identified jointly by governments, health care organizations, health professionals, and the public.” (1, 2) This obligation implies a further commitment to *collaboration, consultation, and reporting*: the adoption of measures to ensure that a socially responsible course of action is followed. Such demonstration of accountability requires a system of checks and balances against which progress on commitments can be measured.

The Towards Unity for Health (TUFH) partnership pentagram (51, 52) offers a framework for consultation and collaboration in addressing the social accountability mandate. Academic institutions are among the stakeholders in the consultation process, which also involves communities, health administrators, policy makers, and health professionals. As Woollard (2006) identifies “...the engaged creation of vision and mission, strategic planning, assigned responsibilities and infrastructure support are essential in translating good intentions into effective vision. If the idea of social accountability is to be more than an idea, some explicit system of responsibility is required.” (53) Woollard further suggests that medical schools must

have the ability "...to build feedback loops that assess their progress towards addressing the needs of their communities" (53). This reporting mechanism is essential to meeting the social accountability imperative.

In our review of the academic and grey literature, we found a number of exemplary programs addressing health disparities and responding to priority health concerns of the community. The success of these projects in addressing specific health disparities appears to rely on individual interest and informal collaboration rather than on a systematic, concerted approach. We have been unable to find any documents or published literature that describe a systematic process by which health disparities are identified, characterized, and addressed by any of the organizations responsible for overseeing PGME. A major policy review, The Core Competency Project undertaken by both accrediting colleges and completed in 2009, failed to include public input and stated "...the scope of the assessment of societal needs was limited to the observed needs of leaders in medical education, members of the profession and health care experts."(54)

The main barriers to meeting the social accountability mandate at the PGME level are tensions between academic freedom, clinical autonomy and the needs of society (2); a lack of conceptual clarity of social accountability, health disparities, and priority health concerns (55); resistance to change (1); and a lack of systematic coordination of initiatives(56). The latter may be exacerbated by the complexity of the PGME system. While PGME is based in university faculties of medicine, it does not exist in isolation. Postgraduate medical education occurs in a complex educational and health care environment. It is funded at the provincial level and implemented through the 17 faculties of medicine affiliated with the AFMC. Accreditation is provided by the CFPC for Family Medicine programs and the RCPSC for all others, with a total of 63 specialty committees and their specific training requirements.

Social accountability and physician maldistribution

A recent study has reviewed a decade of reports calling for medical education reform (57). Social accountability was a predominant theme identified by this review, specifically the social contract of medicine. Within this, Skochelak included the many recommendations that address access to health care for rural and underserved populations. She concludes her discussion with the challenge:

"...if leadership and social accountability are truly thought to effect medical education change ...why is academic medicine so passive on the erosion of the numbers of young physicians choosing to practice in primary care and underserved areas in the past decade?"

PGME relies heavily on contextualized learning. Commissioned paper 2.5: Distributed Postgraduate Medical Education, addresses social accountability as a driver for the development of distributed medical education, in which trainees are placed into a context of learning in underserved communities. Nevertheless, maldistribution of physicians remains a complex systemic problem. At its core, there are too few physicians in underserved areas, both in terms of primary care physicians and generalist specialists. The underlying causes are often due to historical policies and entrenched beliefs (58, 59). Primary care tends to be undervalued as a career, and within specialty training there is a very strong emphasis on subspecialization and career choices that draw trainees to large urban centres. The organization of rotations, their content, where they are situated, how they are accredited and funded all contribute to the individual PGME program's capacity to fulfill its social accountability mandate. Currently it appears many specialty programs are structured in such a way that the majority of the required

rotations can only take place in urban centres, with limited opportunities to partake in rural rotations.

As long as the needs of rural communities are undervalued, and as long as medical institutions continue to reward subspecialization in the form of societal status and financial incentives, and through implicit attitudes which demean primary and generalist careers (the hidden curriculum), such maldistribution is likely to persist. Policy directed at the type and geographical setting of both primary care and generalist specialty programs may be more effective in addressing maldistribution. For further discussion of PGME and health human resources, refer to commissioned papers 1.3 Trends and Issues in Postgraduate Medical Education: Inputs, Outputs and Outcomes and 3.1: Recruitment, Selection and Career Issues in Postgraduate Medical Education.

Accreditation for social accountability

The responsibility and authority for self-regulation, including the responsibility for licensing, credentialing and accreditation, is based on the recognition that the professions have a contract with society. Previously put forward by Boelen (19, 55), the recent Lancet Commission papers on the Education of Health Professionals for the 21st Century proposed accreditation as a valuable tool to effect changes that will move medical schools towards meeting their social accountability mandate. As the process through which institutions are reviewed for compliance with standards of structure, process, and achievement in order to legitimately confer professional certification to their trainees, accreditation links educational activities to societal purpose(58). “The imposition of greater social accountability into accreditation could be instrumental in production of a professional workforce that is well aligned with societal health goals, including equity, quality, and efficiency.”

We have identified that the organizations responsible for accrediting and delivering PGME programs in Canada have expressed a desire to address the health care needs of society, yet this review found little evidence that these intentions are being matched by a systematic approach to the identification of those needs or to the promotion of programs to meet them. To be truly socially accountable, organizations need to move beyond words to a systematic approach to socially responsible actions and a method of reporting on those actions and their effectiveness. The Committee on Accreditation of Canadian Medical Schools (CACMS) has been active in developing and promoting the incorporation of social accountability into accreditation standards of undergraduate education (60).

Health advocacy and social responsibility

At the trainee level, the CanMEDS Health Advocate role appears best positioned to directly respond to the social accountability imperative within medical schools. While the Health Advocate competencies associated with knowledge of population and public health issues and addressing and responding to health disparities are aligned with the obligation to address the priority health concerns of the community, the nebulousness of these competencies has created a situation in which the Health Advocate role is either taken for granted or ignored. A clarification of the roles and responsibilities of the Health Advocate is needed in order to avoid this perception. These specific roles and responsibilities must be made explicit to professionals so that advocacy is included in everyday practice but not confused with it. Furthermore, a dialogue surrounding the responsibilities of individual professionals versus the profession as a whole may help to address the perception that advocacy is beyond the call of duty of most professionals.

A re-examination of the Health Advocate role might also consider how social responsibility is approached in postgraduate training, particularly in the teaching of CanMEDS roles. Social responsibility may be understood more easily as an overarching value rather than a competency to be taught. In this light, social responsibility becomes a foundational principle for medical training, beginning at the undergraduate level and continuing throughout practice.

It is important to note that advocacy at the individual patient level may, in fact, be at odds with the notion of social responsibility. Advocating on behalf of a patient may engender the use of resources that, when viewed from a socially responsible lens, are not consistent with the needs of the whole community. These competing interests form a further facet of the dialogue around the Health Advocate role and its integration with other roles such as Manager and Collaborator.

Postgraduate trainees develop skills and competencies by direct participation in patient care. It follows that residents are likely to learn advocacy in practice rather than through didactic teaching. Residents must have opportunities to experience the clinical context of underserved patient populations and those experiencing health disparities. Residents will be challenged by the complex issues of care in these populations and will need mentorship and opportunities for guided learning and reflection on both the patient specific and broader health and societal issues identified (61).

Summary and Conclusions

Health disparities exist in Canada, reflecting the unequal distribution of the many determinants of health. Canadian medical schools have accepted their social accountability mandate to incorporate social responsiveness and social accountability into the all the functions of the medical school – education, research and provision of health care. At the PGME level, this includes preparation of future physicians to respond to population needs. Social responsibility is a value that underpins the ethos and functions of the school; social accountability is its actions and public reporting of those actions.

There are examples of the social accountability mandate of medical schools and their accrediting organizations being recognized and used to address health disparities in the context of PGME; however, this literature is isolated and limited in scope. We identified four issues emerging from the literature that we believe have implications for the future of postgraduate medical education in Canada. Only one of these, health advocacy, deals directly with the curriculum. The others (the absence of a systematic or strategic process, the ongoing issue of physician maldistribution and the pivotal role of accreditation) relate to the purpose, organization and delivery of PGME.

At a curricular level, there is some tension around how educators and trainees think about advocacy. It is interpreted dichotomously: as inherent in the daily practice of all physicians and as the heroic and altruistic actions of a few. While there are examples of training programs geared towards advocacy and addressing health disparities, these programs tend to exist in isolation, limiting their effectiveness. The practice-based learning environment of PGME can provide opportunities for trainees to participate actively in care of vulnerable, marginalized and underserved populations and opportunities to integrate population and public health as well as health advocacy into all disciplines and specialties.

There are also tensions around the extent of the social accountability mandate of medical schools and how actions can be aligned with intentions. At the heart of this debate is whether medical schools and colleges have a social responsibility which extends beyond the production of socially responsible graduates or whether they need to demonstrate national leadership as

socially accountable organizations in addressing the important issues of health disparities and physician maldistribution and how this can be accomplished in PGME.

The Lancet Commission on the Education of Health Professionals for the 21st Century notes that a third generation of educational reforms is needed to advance medical education (58). Following the first generation of educational reforms promoting a science-based curriculum, and a second generation promoting problem-based instruction, the third generation should promote a systems-based approach to improve the performance of health systems by adapting professional competencies to specific contexts. In relation to health disparities and social accountability, this systems-based approach may include instructional reforms that favour knowledge mobilization and critical reasoning for population and public health including surveillance, health promotion, and population-level interventions.

PGME not only has a critical role to play in cultivating and solidifying these competencies so that trainees have the tools necessary for modern practice, but also has a critical role to play as socially accountable organizations by providing leadership on a socially responsible agenda that is transparent, linked to organizational activities, such as accreditation and program governance, and publically reported.

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Appendix 1: About the Authors

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Sarah Dobson MSc is the research manager at UBC's Centre for Health Education Scholarship (CHES). She has a background in public health through her Master's degree at the Université de Montréal. Her current research interests in medical education are related to the Health Advocate role.

Heather Frost PhD is a qualitative research assistant at the Centre for Health Education Scholarship (CHES) and recently completed doctoral studies in Social and Cultural Geography at the University of British Columbia. She has enjoyed her introduction to medical education so much that she is hoping to become more immersed in the field by joining CHES as a postdoctoral fellow. She is committed to qualitative research and is interested in the processes of identity formation and how identities are informed and shaped by socio-cultural context.

Stéphane Voyer MDCM, FRCPC is a community general internist and a Clinical Educator Fellow at the Centre for Health Education Scholarship, where he is working on a Masters' in Education at the University of British Columbia. His research is focused on feedback as an educational tool in the context of medical education.

Appendix 2: Annotated Bibliography

Health Canada. Social Accountability - A Vision for Canadian Medical Schools. Ottawa: Government of Canada 2002 Contract No.: H39-602/2002 Available at: http://www.afmc.ca/pdf/pdf_sa_vision_canadian_medical_schools_en.pdf

This report published by Health Canada provides an excellent introduction to the concepts of social accountability and social responsiveness. The Steering Committee, with membership from faculties of medicine, AFMC, RCPSC, CAIR, CFMS and Health Canada articulates a clear vision and set of principles for the social accountability of medical schools.

Public Health Agency of Canada. Reducing Health Disparities – Roles of the Health Sector: Discussion Paper. Prepared by the Health Disparities Task Group of the Federal/Provincial/Territorial Advisory Committee on Population Health and Health Security, editor. Ottawa: Government of Canada; 2004. Available at: http://www.phac-aspc.gc.ca/ph-sp/disparities/pdf06/disparities_discussion_paper_e.pdf

This relatively short discussion paper provides an overview of health disparities and specifically addressed the role of the health sector in addressing disparities. It is well referenced and deals specifically with the issue of access to care in reducing disparities.

Woollard RF. Caring for a common future: medical schools' social accountability. Medical Education 2006;40(4):301-13.

From the overview: "Medical schools vary considerably in their focus on priority health needs and the resources that they have available for the task. There is a growing trend, under the banner of 'the social accountability/responsibility of medical schools' to address this. This paper outlines the origins and expression of the various trends that have given rise to this concern and can help respond to it. It provides relevant examples of successful pedagogic responses."

Oandasan IF, Barker KK. Educating for Advocacy: Exploring the Source and Substance of Community-Responsive Physicians. Academic Medicine 2003;78(10):S16-S9.

This paper describes 8 case studies of community responsive physicians and their advocacy on behalf of individuals and communities. It identifies three educational strategies to develop and nurture community-responsive advocacy in medical trainees.

Appendix 3: Search Strategy

Health Inequities (OVID-SP MedLine, EMBASE)

- 1 health status/ or health status disparities/
- 2 health inequities.mp.
- 3 health disparities.mp
- 4 Canada/ or Canada.mp.
- 5 1 or 2 or 3
- 6 4 and 5

Postgraduate Medical Education (OVID-SP MedLine, EMBASE)

- 1 Education, Medical, Graduate/
- 2 postgraduate medical education.mp.
- 3 "Internship and Residency"/
- 4 1 or 2 or 3
- 5 Canada/ or Canada.mp.
- 6 4 and 5

The above two searches were then combined with each of the following groupings in turn:

Social accountability (OVID-SP MedLine, EMBASE)

- 1 social accountability.mp.
- 2 social responsibility.mp. or Social Responsibility/
- 3 social mission.mp.
- 4 Organizational Objectives/
- 5 1 or 2 or 3 or 4

Advocacy (OVID-SP MedLine, EMBASE)

- 1 Patient Advocacy/ or advocacy.mp. or advocate.mp.

Access to health care (OVID-SP MedLine, EMBASE)

- 1 Medically Underserved Area/
- 2 health services accessibility.mp. or Health Services Accessibility/
- 3 health care disparities.mp. or Health care Disparities/
- 4 minority groups/ or socioeconomic factors/
- 5 Professional Practice Location/
- 6 1 or 2 or 3 or 4 or 5

Population Health (OVID-SP MedLine, EMBASE)

- 1 exp Public Health/ ep, ma, sn, sd, td, [Epidemiology, Manpower, Statistics & Numerical Data, Supply & Distribution, Trends]
- 2 population health.mp.
- 3 1 or 2