GLOBAL HEALTH CORE COMPETENCIES IN UNDERGRADUATE MEDICAL EDUCATION

A CANADIAN NATIONAL CONSENSUS

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OVERVIEW

PURPOSE

The purpose of this document is to present a Canadian national consensus on core curriculum competencies which will prepare medical graduates to respond to the diverse needs of individuals and communities in Canada and abroad. These core competencies will guide undergraduate medical programs across Canada in developing effective, competency-based training for their undergraduate medical trainees.

RATIONALE

The field of global health has developed considerably in the past two decades, an evolution that has been reflected in the changing definition of "global health." While global health has centuries-old roots in addressing cross-border epidemics and tropical diseases, global health has since come to mean much more than simply 'international health' and is no longer limited to the health of the developing world (Rowson, et al., 2012). Though debate about the precise definition of global health continues and several definitions have been proposed, a recent consensus definition appropriate for the purpose of defining these core competencies describes global health as "an area for study, research, and practice that places a priority on improving health and achieving equity in health for all people worldwide" (Koplan, et al., 2009).

RATIONALE I – Increased Student Demand

While the pursuit of a clear definition for global health continues, medical trainees in Canada (AAMC, 2012) and internationally (IMFSA, 2010) are calling for increased education in global health. This interest occurs at all levels of undergraduate medical training and continues on into residency (CAIR, 2012). As increasing numbers of medical students express interest in global health, it has never been more important for Canadian medical schools to share a consensus on global health core competencies.

RATIONALE II – Essential Skills of Practice

In Canada, medical schools have yet to adequately respond to this increased demand for quality training in global health. At present, the global health component of medical school curricula is best described as "fragmented and insufficient" (Arthur, Battat, & Brewer, 2011) resulting in an "inconsistent, and haphazard, patchwork of programs" (Belani, Dempsey, & Stone).

Nevertheless, it is crucial that core competencies in global health are taught not just to students who express interest in a global health, but also to every Canadian medical student because of the richness of learning opportunities. Students who participate in global health experiences demonstrate essential skills, including "increased medical knowledge, heightened diagnostic acumen, less reliance on technology, increased sensitivity to and awareness of cost, and improved appreciation for cross-cultural communication." (Evert, Drain, & Hall, 2014). Global health education and experiences promote a greater understanding of the physician's role as an advocate, and provide opportunities to reflect and critically examine the ways in which healthcare providers, authorities, and leaders have been accountable to the world's most pressing challenges.

RATIONALE III – Impact of Globalization

Additionally, the importance of global health education will only continue to increase in this era of globalization (Institute of Medicine, 2009). As the distinction between domestic and international health problems dwindles

(Brundtland, 2001), medical students must be prepared for the ever-increasing likelihood that their next patient hails from a marginalized population or has just come from a distant region of the world.

RATIONALE IV – International Call for Training

Finally, the medical community has recognized the importance of equipping tomorrow's physicians with the skills to address global health issues, and has called upon medical schools to adequately address this need. The World Health Organization's 2008 report calls for improved training of global health competencies for medical professionals and the public (especially on the "vital" topic of social determinants of health) (World Health Organization Commission on Social Determinants of Health, 2008). The Global Consensus for Social Accountability of Medical Schools initiative (Boelen, 2011) mirrors the call of the Future of Medical Education in Canada project to prioritize medical graduates who can "respond to the diverse needs of individuals and communities within Canada, as well as meet international responsibilities to the global community" (AFMC, 2009).

METHODS

PHASE I – GHEC Competencies

The effort to create a North American consensus on a list of essential core global health competencies was first originated by the Global Health Education Consortium (GHEC) following a thorough meta-analysis of the literature (Joint US/Canadian Committee on Global Health Core Competencies, 2009). These since have been adapted by Belani et. al. (Belani, Dempsey, & Stone) to fit the ACGME Outcome Project competencies framework (Swing, 2007).

PHASE II – CanMEDS Application

In a similar fashion, we adapted the GHEC competencies to a Canadian perspective by structuring them into the CanMEDS framework and obtaining feedback from the Global Health Working Group of the Association of Faculties of Medicine of Canada. Subsequently, the document was posted for peer review on the Canadian Healthcare Education Commons (AFMC, n.d.). This document had been compiled and edited with feedback from global health faculty leaders and student leaders (CFMS) from medical schools across Canada, and presented at the CCME in April 2012 and 2013.

PHASE III – National Consensus

We then requested peer review from faculty members, physicians, residents, and medical students at all Canadian medical schools, as well as global health education leaders across North America. As reviewers, they had the opportunity to choose to endorse, reword, or eliminate the core competencies listed in an electronic survey. As well, reviewers could add core competencies and provide general comments or suggestions. Each individual was asked to evaluate the core competencies as a part of a set of skills, knowledge, and experiences that all Canadian undergraduate medical students should possess at graduation. The full survey was preceded by a pilot survey.

The pilot survey was completed by thirteen individuals representing ten Canadian medical schools: six professors, one associate dean, one resident, and five undergraduate medical students. The survey respondents were asked to not only complete the survey, but to also evaluate the survey design. Based on the feedback, minimal changes were required before disseminating to the full review group.

The final survey was sent to 137 individuals of which 45 individuals responded fully. These reviewers include global health deans/directors, curriculum deans/directors, postgraduate trainees (i.e. residents and fellows), and

undergraduate medical students. There were 24 faculty/physician respondents and 21 medical trainee (undergraduate and postgraduate) respondents. All medical schools in Canada except the Northern Ontario School of Medicine (NOSM) were represented within the review process. However, it should be noted that NOSM has already independently implemented a previous draft of these core competencies.

All responses were analyzed by Dr. Videsh Kapoor and Golden Gao, and changes to the global health core competencies were made based on the responses. The final list of global health core competencies were endorsed by the authors of this document.

PHASE IV – Implementation

This final draft of the core competencies has been the result of an iterative process with national input. It serves as a resource document to assist medical schools in integrating global health education into their undergraduate medical curricula. These core competencies may overlap with existing themes already present in current curricula and we encourage medical educators and global health education leaders to use this resource to create global health education content that best fits with their curricular framework.

What we anticipate and hope is a diverse and creative application of these core competencies in ways that best serve undergraduate medical programs across Canada.

FINAL LIST OF GLOBAL HEALTH CORE COMPETENCIES

MEDICAL EXPERT

- Describe the global burden of disease, including the major causes of morbidity and mortality across regions.
 1.1. Describe neglected tropical diseases in the global context.
- 2. Describe the role of major Canadian and international health organizations such as the UN, WHO, DFATD, CDC, and governments.
- 3. Describe the pathophysiology, epidemiology, diagnosis, and treatment of diseases that have major implications both in Canada and internationally, and understand how Canada is linked to other countries with respect to communicable diseases, non-communicable diseases, and chronic illness.
- 4. Describe the shift and causal factors towards increasing non-communicable diseases (NCDs) and chronic illness, and how this impacts vulnerable populations.
- 5. Develop an approach to the management and assessment of health issues (including the ability to access information and support) that can be encountered in Canada and in international clinical settings such as travel medicine clinics, immigrant and refugee health, and in clinical practice abroad.

COMMUNICATOR

- 1. Demonstrate cultural competency in patient care and community engagement, encompassing the concepts of cultural safety, humility, awareness, and sensitivity.
- 2. Provide patient-centered care that demonstrates an understanding of the cultural context of well-being, illness and disease, and use this to strengthen the doctor-patient relationship.
- 3. Engage patients, families, and communities in developing plans that reflect the patient's/community's health care needs and goals.
 - 3.1. Facilitate discussions with patients and their families in a way that is respectful, non-judgmental, and culturally safe.
 - 3.2. Know how to locate resources and tools to improve communication and dissemination of knowledge in a health care or community setting.
- 4. Conduct an interview with a patient whose culture and/or language is different from your own.
 - 4.1. Utilize an interpreter effectively in both patient- and community- level interactions.
- 5. Describe how personal context and beliefs can impact the doctor-patient and doctor-community relationship, and demonstrate appropriate strategies to maintain effective communication and cooperation.

COLLABORATOR

- 1. Recognize that sustainable development requires partnership at the community level, especially in low resource settings.
- 2. Explain how to develop appropriate multidisciplinary partnerships at the community level, including with non-health-care disciplines (e.g. governments, engineers, economists, etc.).
- 3. Demonstrate respect for the critical role of non-physician healthcare providers in building a sustainable health care system in a resource limited setting.

LEADER

1. Identify the key political and economic stakeholders, policies and programs that shape the social determinants of health in a given community.

- 2. Locate services available to vulnerable populations in your community (e.g. services for immigrants, refugees, aboriginals, substance users, homeless individuals, and those suffering from mental health issues).
- 3. Describe the advantages and challenges of different models of healthcare delivery (e.g., primary health care model, community-based care models, and public health models) and their relevance in various contexts.
- 4. Discuss the allocation of resources for a low resource setting that is in balance and cooperation with the wishes of the community itself (i.e. appropriately identifying and prioritizing key health care expenditures such as access to clean water, sanitation, vaccination, and maternal and child care)
- 5. Demonstrate the ability to assume an appropriate and effective role within diverse teams, cultural contexts, and low resource settings.
- 6. When appropriate, participate in pre-departure training and post-return debriefing for work in a low resource setting, and ensure the same for all team members.

HEALTH ADVOCATE

- 1. Explain the major determinants of health of vulnerable populations and the mechanisms with which they affect the health of individuals and populations, including issues of poverty, access to basic needs, environment, human rights, gender, conflict, economic, and political factors.
- 2. Identify vulnerable or marginalized populations and demonstrate an understanding of the different tools and strategies used to advocate for improved healthcare delivery and support to these communities (rural, aboriginal, refugee, immigrant, and/or low- and middle- income countries).
 - 2.1. Discuss strategies to advocate for system-level change with respect to the social determinants of health and how this impacts the concept of patient-centered care and community-centered care.
 - 2.2. Identify and describe evidence-based interventions which will have the most impact in a low resource setting (e.g., immunizations, nutritional supplements, education, water and sanitation).
- 3. Discuss the interconnectedness of health in the Canadian landscape with the health of the populations in other regions of the world.
- 4. Outline strategies for investment in health and health determinants as a resource for economic and human development in high and low resource settings.
- 5. Recognize the role of primary health care, including disease prevention, health promotion, and health surveillance activities in Canada and abroad as an essential tool in maintaining and improving health, especially in underserved populations.
- 6. Participate in activities that advocate for the improved health of marginalized or vulnerable populations or communities in a low resource setting (rural, aboriginal communities, refugee, immigrant, and/or low- and middle-income countries).
- 7. Discuss how advocacy requires partnerships with patients, communities, and other professionals.

SCHOLAR

- 1. Identify the forces of change that impact global health challenges and recognize that this requires a commitment to keeping up to date with health policies and knowledge of global burden of disease.
- 2. Identify and utilize population and disease surveillance databases and valid information resources that will assist with patient and population care, scholarly inquiry, and self-directed learning.
 - 2.1. Use a conceptual framework on the social determinants of health to describe how social, political and economic changes influence the global distribution of health and disease.
- 3. Demonstrate an understanding of ethical principles of clinical and translational research in a low resource setting.

- 4. Propose culturally appropriate educational tools and resources for knowledge dissemination within populations experiencing health inequities. (knowledge translation)
- 5. Critically evaluate global health research and recognize the impact of the imbalance in funding of research that addresses the burden of diseases in the poorest populations versus those of the wealthiest, and understand the strategies proposed to correct it.

PROFESSIONAL

- 1. Participate in the practice of medicine with due regard that health is a basic human right as defined by the Universal Declaration of Human Rights (1948).
- 2. Discuss the unique ethical challenges involved in practicing medicine with vulnerable patients and communities.
- 3. Interact respectfully with others in relation to age, gender, ethnicity, place of origin, religious/spiritual beliefs, political beliefs, marital or family status, physical or mental disability, socioeconomic status, sexual orientation, or criminal convictions.
- 4. Demonstrate the ability to appropriately obtain information about professional, legal, and cultural expectations within a new setting.
- 5. Realistically assess the potential of the clinician's skills and societal position to have an impact in community health, both locally and globally.
- 6. Discuss the potential for unintended consequences (both positive and negative) of working in a low resource setting.
- 7. Practice the importance of self-care, self-reflection, personal awareness and physician well-being in professional practice, particularly in unfamiliar environments.

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ENDORSEMENTS

This report is formally endorsed by:

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