

UC Irvine

UC Irvine Previously Published Works

Title

Time for action: key considerations for implementing social accountability in the education of health professionals

Permalink

<https://escholarship.org/uc/item/6hp2d73h>

Journal

Advances in Health Sciences Education, 23(4)

ISSN

1382-4996

Authors

Ventres, William

Boelen, Charles

Haq, Cynthia

Publication Date

2018-10-01

DOI

10.1007/s10459-017-9792-z

Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at

<https://creativecommons.org/licenses/by/4.0/>

Peer reviewed

Time for action: key considerations for implementing social accountability in the education of health professionals

William Ventres^{1,2} · Charles Boelen^{3,4} · Cynthia Haq⁵

Received: 3 October 2016 / Accepted: 17 August 2017 / Published online: 12 September 2017
© Springer Science+Business Media B.V. 2017

Abstract Within health professional education around the world, there exists a growing awareness of the professional duty to be *socially responsible*, being attentive to the needs of all members of communities, regions, and nations, especially those who disproportionately suffer from the adverse influence of social determinants. However, much work still remains to progress beyond such good intentions. Moving from contemplation to action means embracing *social accountability* as a key guiding principle for change. Social accountability means that health institutions attend to improving the performance of individual practitioners and health systems by directing educational and practice interventions to promote the health of all the public and assessing the systemic effects of these interventions. In this Reflection, the authors (1) review the reasons why health professional schools and their governing bodies should codify, in both curricular and accreditation standards, norms of excellence in social accountability, (2) present four considerations crucial to successfully implementing this codification, and (3) discuss the challenges such changes might entail. The authors conclude by noting that in adopting socially accountable criteria, schools will need to expand their philosophical scope to recognize social accountability as a vitally important part of their institutional professional identity.

The author Charles Boelen is retired from the Program of Human Resources for Health, World Health Organization, Geneva, Switzerland.

✉ William Ventres
wventres@gmail.com

¹ Department of Family and Preventive Medicine, College of Medicine, University of Arkansas for the Medical Sciences, 4301 W. Markham Street, #530, Little Rock, AR 72205-7199, USA

² Institute for Studies in History, Anthropology and Archeology, University of El Salvador, San Salvador, El Salvador

³ Independent International Consultant, Sciez, France

⁴ Program of Human Resources for Health, World Health Organization, Geneva, Switzerland

⁵ Department of Family Medicine and Community Health, University of Wisconsin School of Medicine and Public Health, Madison, WI, USA

Keywords Global health · Health equity · Health professional education · Humans · Interprofessional relations · Social accountability · Social responsibility

Introduction

Social determinants substantially influence the health and illness of all people (Braveman et al. 2010; Woolf and Braveman 2011). Although recognizing these determinants has long been a topic on the academic agenda (Porter 2006; Schroeder et al. 1989; Showstack et al. 1992), few educational institutions have fully embraced the charge of integrating them in their curricula for training health professionals. They have yet to assume the “obligation to direct their education, research, and service activities toward addressing the priority health concerns of the community, the region, or the nation they have a mandate to serve” (Boelen and Heck 1995, p. 3).

There clearly exists a growing awareness of the professional duty to be *socially responsible*, meaning being attentive to the needs of everyone, including those who disproportionately experience illness as an adverse effect of social determinants. However, much work still remains to move beyond such good intentions. The progression from contemplation to action means embracing *social accountability* as a guiding principle of education and practice. Social accountability implies that health professional schools attend to (1) improving the performance of individual practitioners and health systems through interventions that promote the health of all the public, including those living on the margins of society, and (2) assessing the systemic impact of these interventions (Boelen and Woollard 2011).

In light of these considerations, we ask: *Is it time for academic health professional institutions and their governing bodies to codify in their professional curricula and accreditation standards norms for excellence in social accountability?*

Current realities

Many health professional schools have expressed in their mission statements interest in attending to community needs, especially as they relate to people living in medically underserved areas (Mullan et al. 2010; Morley et al. 2015). Various educationally-focused organizations have similarly articulated their agreement with such sentiments (Adler et al. 2016; Frank et al. 2015; Robert Wood Johnson Foundation 2016; National Academies of Sciences, Engineering, and Medicine 2016). Over the years, several academic institutions have sponsored programs dedicated to training small groups of health professionals in the principles and practice of social medicine and community health (Ho et al. 2008; Strelnick et al. 2008; Zink et al. 2008; Dharamsi et al. 2011; Haq et al. 2013; Kaye et al. 2010), particularly with an eye toward educating students about the effects of social determinants (O'Brien et al. 2014; Meurer et al. 2011). Although progress is underway in select settings (Strasser et al. 2015), there still remains a huge gap between the expressed goals of these bodies and initiatives and the institutional response of the greater academic community (Fleet et al. 2008; Tyer-Viola et al. 2009; Puschel et al. 2014; Armstrong and Rispel 2015).

Recently, interest in learning and teaching about the social determinants of health and their effects has blossomed (Bezruchka 2012; Braveman and Gottlieb 2014). Much scholarly attention has been given to upstream causes and downstream consequences of such factors as income inequity, food insecurity, and racism (Stringhini et al. 2010; Weiler et al. 2015; Paradies et al. 2015). As well, the popularity of global health as a topic for scholarly discourse (Haq et al. 2000; Panosian and Coates 2006; Ventres 2017), the attraction of participating on short-term international service-

learning trips (Parsi and List 2008; Ventres and Wilson 2015), the implementation of South–South academic exchanges (Quintana et al. 2012; Flinkenflögel et al. 2015), and various efforts by interdisciplinary leaders in the majority world (Papp et al. 2013; Michaels et al. 2014) have heightened interest in understanding how social determinants affect health outcomes around the world (Ventres and Fort 2014; Kasper et al. 2016). Nonetheless, regardless of location, these activities have fallen short of creating a critical consciousness around social accountability as a means of addressing health inequities (Kumagai and Lyson 2009). The gap between well-informed intention and sustained commitment to change remains wide (Sharma et al. 2017).

The reality of these gaps reflects common cultural ideologies that have deep roots in education and practice (Bloom 1989; Eisenberg 1995; Engel 1988). As well, it strongly suggests that current approaches are not sufficient to improve the health of all (Starfield 2006). Collecting evidence documenting how the health of vulnerable people unduly suffers in relation to that of those who are well off has not been enough to change systems of education and practice (Pickett and Wilkinson 2014), and the knowledge that addressing inequities can reduce health disparities has not resulted in improved health outcomes across populations (Bloom 1990; Marmot 2005). Consequently, the question remains: How do we move toward rectifying these gaps and reducing these disparities?

Bridging the gaps

We believe the answer to this question rests in the execution of two parallel strategies. First, we concur with others who have recently called for major cultural transformations within health professional education, aimed toward inculcating among faculty members and students a commitment to health equity and incorporating such values as generosity, solidarity, and social interdependency when teaching how social determinants affect health (Frank 2004; Dawson and Jennings 2012; Sharma et al. 2017; Ventres et al. 2016). Second, in order to ameliorate the burdens these determinants have on health inequities, we assert that principles of social accountability must guide changes in the structure and outcomes of medical education and practice. As well, resultant socially accountable interventions must be implemented and their effects assessed. This second strategy is our focus here.

In order to move from intention to action, we suggest that academic administrators, affiliated hospital and health plan executives, and members of governing bodies of accrediting professional associations commit to social accountability through leadership development, organizational capacity building, and programmatic governance. We encourage these institutional authorities to address social determinants by (1) re-orienting their standards for education, concentrating on high-value, community-based, health-promoting primary-care interventions, and (2) targeting these interventions toward economically poor and socially marginalized people in their surrounding communities. We urge these academic, corporate, and administrative leaders to make social accountability central to the work of training health professionals for, and providing medical services to, all people in the communities they serve.

Key considerations

Much information supporting this move to social accountability already exists. This includes specific frameworks that model social accountability in action (Boelen and Woollard 2009; Leinster 2011; Ventres and Dharamsi 2015; Boelen et al. 2016),

declarations of policy from international institutions and organizations (Pan American Health Organization 2007; Training for Health Equity Network 2011; Murray et al. 2012; Larkins et al. 2013; Reddy et al. 2013), and tactical statements such as the Global Consensus for Social Accountability of Medical Schools (2010). As well, various articles describe how socially accountable principles have informed particular curricular and service activities (Meili et al. 2011; Kaprielian et al. 2013; Strasser et al. 2015), some even suggesting how to apply them at the level of patient interaction (Ventres and Haq 2014; Buchman et al. 2016; Goel et al. 2016; Woollard et al. 2016).

Based on our review of these sources and our own experience leading ventures in social accountability, we submit that academic administrators, affiliated hospital and health plan executives, and members of governing bodies of accrediting professional associations consider four critical factors as they work to implement socially accountable goals. Although not unique to social accountability, they are vital components of any activity or planned intervention that purports to be socially accountable. These four considerations, each accompanied by corresponding task-oriented concerns that require examination (Table 1), include:

1. *Partnerships* Recognizing how social determinants influence health outcomes is not something that any member of any health profession can accomplish in isolation.

Table 1 Implementing social accountability in health professional education—key factors, considerations, and actions

Critical factor	Key considerations	Task-oriented actions (representative examples/rationales)
Partnerships	Identify key stakeholders	Assess community health resources/needs (US Centers for Disease Control and Prevention 2013)
	Nurture strategic/collaborative relationships	Develop community-based/participatory strategies (South and Phillips 2014)
	Develop targets for implementation/assessment	Set communally-established equitable goals (Eichbaum 2017)
Accreditation	Link targets to socially accountable goals	Review exemplar SA programs/current site specific activities (Hosny et al. 2015)
	Explore social/environmental perspectives	List and compare current/prospective SA standards (Frank et al. 2015)
	Emphasize long-term service/stewardship needs	Incorporate a test/revise/re-test plan to develop standards (Boelen et al. 2012)
Competencies	Integrate SDOH in planning/implementation	Identify interdisciplinary individual/institutional objectives (Frenk et al. 2010)
	Focus on underserved/marginalized areas	Include community-oriented development goals (Strasser et al. 2013)
	Reference population health measures	Re-orient measures of evaluation toward community outcomes (The Training for Health Equity Network 2011)
Leadership	Build appropriate human/institutional resources	Identify influential program participants (Shaw et al. 2012)
	Create/refine inventive assessment tools	Select key areas for assessment (engagement, responsiveness) (Lodenstein et al. 2017)
	Nurture SA orientations/intentions/ethics	Revise vision/mission statements to reflect SA plans (Morley et al. 2015)

Becoming more socially accountable means identifying key stakeholders in healthcare and social systems, those who provide services as well as those who receive them. It means developing strategic and collaborative partnerships with these stakeholders. It means, as well, engaging with these stakeholders, across institutional and cultural boundaries, to promote best practices, systematic assessments, and programmatic results that are mutually beneficial and sustainable over time.

2. *Accreditation* Integrating social accountability into curricular and service endeavors means that standards for implementation and evaluation must address systemic issues such as access to health-care, equity, continuity, and relational engagement, inclusive of all societal members. It is important that these standards address institutional and individual capabilities in light of such concerns as social context, history, culture, geographical place, service needs, and financial stewardship.
3. *Competencies* Moving toward social accountability in health professional education means training and evaluating learners as to how knowledge, skills, attitudes, intentions, and relationships interact in the promotion of health as well as the treatment of disease. While such abilities are only part of the equation that adds up to producing the right health care professionals to offer the right care “with the right partners at the right time in the right place” (Boelen and Woollard 2011, p. 615), those promoting social accountability include, among others: understanding social determinants and upstream approaches to care; attending to underserved, marginalized, and vulnerable people and communities; applying skills in health advocacy, teamwork, and cross-cultural communication; and, employing evaluation and administrative tools in public and population health.
4. *Leadership* Growing social accountability implies focusing human and financial resources on specific objectives. This means (1) expanding appropriate training strategies and assessment methods, and (2) aligning financial incentives to support socially accountable goals. It means supporting the strategic, advocacy, and research roles of schools as they apply to medically underserved areas close to and far away from where they are located. It means developing and validating tools to assess the short- and long-term impacts of educationally-, scholarly-, and practice-based interventions aimed at improving the health of the public. Ultimately, it means welcoming a philosophical shift in educational ideology, one that begins with a willingness to accept institutional social accountability and may require capacity-building assistance, at the highest organizational levels, to guide the way.

Further considerations

We are well aware that many educators, administrators, and executives may be wary of these suggestions. Some may argue that attending to social accountability lies well outside the traditional domain of health professional education, or that adding another area of required focus will decrease time allotted for other concerns in already crowded curricula. Others may note that the responsibility for social determinants and their influence on health and illness lies with other professionals, especially those working in politics, social services, and even public health—physicians, nurses, and other clinicians should stick to the diagnosis and treatment of disease (especially given how current systems of remuneration preferentially support these pursuits). Still others may aver that the future of health care, and hence the education of its professionals, lies in the potential of high-tech diagnostics,

gene-based therapies, and population-derived “big data”, rather than in interventions traditionally associated with social accountability, including participatory public engagement, interprofessional collaboration, and the integration of high-quality primary care in communities of need.

We recognize that addressing social accountability, through the incorporation of partnerships, revision of accreditation standards, elaboration of appropriate competencies, and enhancement of leadership potential, signifies a change away from of the conventional wisdom that currently steers the course of health professional education (Cooke et al. 2010). We agree with those who see this change as a necessary adaptation, and not a rejection, of tenets that have guided education worldwide for over a century (Maeshiro et al. 2010). We also see this integration less as a burden and more as an opportunity for academic institutions: socially accountable schools need not give up all that they do well today as they become key actors in community assessment, civic engagement, and documentation of outcomes. In order to achieve success, however, they will need to expand their philosophical scope to recognize community as a vitally important part of their institutional professional identities—social accountability does not end with curricular reforms and cannot be left as a task for others (Vanderbilt et al. 2016).

Conclusion

We applaud the admirable efforts that many health educators around the world already have made to instill in their colleagues and students a sense of social responsibility. Now, however, given (1) the mounting evidence that social determinants affect all people’s health, and (2) the inconsistent institutional commitment to systematically addressing these determinants in current medical education and practice, it is time for administrators and the governing bodies of health professional schools to become socially accountable by explicitly attending to the four factors we outline above. Educators and other stakeholders can no longer assume that the health of the public is others’ responsibility and does not pertain to their interests. It is time to lead and take action: it is time to make social accountability a core value and an institutional duty. We look forward to seeing social accountability become a driving force behind progressive changes in health professional curricula, the enactment of new accreditation standards, and a positive influence on the health of all people in communities worldwide.

Acknowledgements Dr. Ventres thanks the Brocher Foundation, Geneva, Switzerland; the Faculty of Health Sciences, Nelson Mandela Metropolitan University, Port Elizabeth, South Africa; and the Institute for the Medical Humanities, University of Texas Medical Branch, Galveston, Texas, for supporting him with residential fellowships during which this essay was designed, written, and revised.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

References

- Adler, N. E., Cutler, D. M., Fielding, J. E., Galea, S., Glymour, M. M., Koh, H. K., et al. (2016). *Addressing social determinants of health and health disparities: A vital direction for health and health care*. Retrieved May 11, 2017 from <https://nam.edu/wp-content/uploads/2016/09/Addressing-Social-Determinants-of-Health-and-Health-Disparities.pdf>.

- Armstrong, S., & Rispel, L. (2015). Social accountability and nursing education in South Africa. *Global Health Action*, 8, 27879. doi:[10.3402/gha.v8.27879](https://doi.org/10.3402/gha.v8.27879).
- Bezruchka, S. (2012). The hurrider I go the behinder I get: The deteriorating international ranking of US health status. *Annual Review of Public Health*, 33, 157–173. doi:[10.1146/annurev-publhealth-031811-124649](https://doi.org/10.1146/annurev-publhealth-031811-124649).
- Bloom, J. R. (1990). The relationship of social support and health. *Social Science and Medicine*, 30, 635–637.
- Bloom, S. W. (1989). Structure and ideology in medical education: An analysis of resistance to change. *Journal of Health and Social Behavior*, 29, 294–306.
- Boelen, C., Dharamsi, S., & Gibbs, T. (2012). The social accountability of medical schools and its indicators. *Education for Health (Abingdon)*, 25, 180–194. doi:[10.4103/1357-6283.109785](https://doi.org/10.4103/1357-6283.109785).
- Boelen, C., & Heck, J. (1995). *Defining and measuring the social accountability of medical schools*. Geneva: World Health Organization.
- Boelen, C., Pearson, D., Kaufman, A., Rourke, J., Woollard, R., Marsh, D. C., et al. (2016). Producing a socially accountable medical school: AMEE Guide No. 109. *Medical Teacher*, 38, 1078–1091. doi:[10.1080/0142159X.2016.1219029](https://doi.org/10.1080/0142159X.2016.1219029).
- Boelen, C., & Woollard, R. F. (2009). Social accountability and accreditations: A new frontier for educational institutions. *Medical Education*, 43, 888–894.
- Boelen, C., & Woollard, R. (2011). Social accountability: The extra leap to excellence for educational institutions. *Medical Teacher*, 33, 614–619. doi:[10.3109/0142159X.2011.59024](https://doi.org/10.3109/0142159X.2011.59024).
- Braveman, P. A., Cubbin, C., Egerter, S., Williams, D. R., & Pamuk, E. (2010). Socioeconomic disparities in health in the United States: What the patterns tell us. *American Journal of Public Health*, 100(suppl 1), S186–S196. doi:[10.2105/AJPH.2009.166082](https://doi.org/10.2105/AJPH.2009.166082).
- Braveman, P., & Gottlieb, L. (2014). The social determinants of health: It's time to consider the causes of the causes. *Public Health Reports*, 129(suppl 2), 19–31. doi:[10.1177/00333549141291S206](https://doi.org/10.1177/00333549141291S206).
- Buchman, S., Woollard, R., Meili, R., & Goel, R. (2016). Practising social accountability. From theory to action. *Canadian Family Physician*, 62, 15–18.
- Cooke, M., Irby, D., & O'Brien, B. (2010). *Educating physicians: A call for reform of medical school and residency*. San Francisco, CA: Jossey-Bass.
- Dawson, A., & Jennings, B. (2012). The place of solidarity in public health ethics. *Public Health Review*, 34, 65–79.
- Dharamsi, S., Ho, A., Spadafora, S. M., & Woollard, R. (2011). The physician as health advocate: Translating the quest for social responsibility into medical education and practice. *Academic Medicine*, 86, 1108–1113. doi:[10.1097/ACM.0b013e318226b43b](https://doi.org/10.1097/ACM.0b013e318226b43b).
- Eichbaum, Q. (2017). Acquired and participatory competencies in health professions education: Definition and assessment in global health. *Academic Medicine*, 92, 468–474. doi:[10.1097/ACM.0000000000001382](https://doi.org/10.1097/ACM.0000000000001382).
- Eisenberg, L. (1995). Medicine: Molecular, monetary, or more than both? *Journal of the American Medical Association*, 274, 331–334.
- Engel, G. L. (1988). How much longer must medicine's science be bounded by a seventeenth century world view? In K. L. White (Ed.), *The task of medicine: Dialogue at Wickenburg* (pp. 113–136). Menlo Park, CA: The Henry Kaiser Family Foundation.
- Fleet, L. J., Kirby, F., Cutler, S., Dunikowski, L., Nasmith, L., & Shaughnessy, R. (2008). Continuing professional development and social accountability: A review of the literature. *Journal of Interprofessional Care*, 22(Suppl 1), 15–29. doi:[10.1080/13561820802028360](https://doi.org/10.1080/13561820802028360).
- Flinkenflögel, M., Ogunbanjo, G., Cubaka, V. K., & De Maeseneer, J. (2015). Rwandan family medicine residents expanding their training into South Africa: The use of south-south medical electives in enhancing learning experiences. *BMC Medical Education*, 15, 124. doi:[10.1186/s12909-015-0405-3](https://doi.org/10.1186/s12909-015-0405-3).
- Frank, A. (2004). *The renewal of generosity: Illness, medicine, and how to live*. Chicago, IL: University of Chicago Press.
- Frank, J. R., Snell, L., & Sherbino, J. (Eds.). (2015). *CanMEDS 2015 physician competency framework*. Ottawa: Royal College of Physicians and Surgeons of Canada.
- Frenk, J., Chen, L., Bhutta, Z. A., Cohen, J., Crisp, N., Evans, T., et al. (2010). Health professionals for a new century: Transforming education to strengthen health professions in an interdependent world. *Lancet*, 376, 1923–1938. doi:[10.1016/S0140-6736\(10\)61854-5](https://doi.org/10.1016/S0140-6736(10)61854-5).
- Global Consensus for Social Accountability of Medical Schools. (2010). (*East London, South Africa*). Retrieved May 11, 2017 from <http://www.healthsocialaccountability.org>.
- Goel, R., Buchman, S., Meili, R., & Woollard, R. (2016). Social accountability at the micro level: One patient at a time. *Canadian Family Physician*, 62(287–290), 299–302.

- Haq, C., Rothenberg, D., Gjerde, C., Bobula, J., Wilson, C., Bickley, L., et al. (2000). New world views: Preparing physicians in training for global health work. *Family Medicine*, *32*, 566–572.
- Haq, C., Stearns, M., Brill, J., Crouse, B., Foertsch, J., Knox, K., et al. (2013). Training in urban medicine and public health: TRIUMPH. *Academic Medicine*, *88*, 352–363. doi:[10.1097/ACM.0b013e3182811a75](https://doi.org/10.1097/ACM.0b013e3182811a75).
- Ho, K., Buote, D., Jarvis-Selinger, S., Lauscher, H. N., Ferdinands, L., Parboosingh, J., et al. (2008). Achieving social accountability through interprofessional collaboration: The Canadian medical schools experience. *Journal of Interprofessional Care*, *22*(suppl 1), 4–14. doi:[10.1080/13561820802028410](https://doi.org/10.1080/13561820802028410).
- Hosny, S., Ghaly, M., & Boelen, C. (2015). Is our medical school socially accountable? The case of Faculty of Medicine, Suez Canal University. *Medical Teacher*, *37*(Suppl 1), S47–S55. doi:[10.3109/0142159X.2015.1006600](https://doi.org/10.3109/0142159X.2015.1006600).
- Kaprielian, V. S., Silberberg, M., McDonald, M. A., Koo, D., Hull, S. K., Murphy, G., et al. (2013). Teaching population health: A competency map approach to education. *Academic Medicine*, *88*, 626–637. doi:[10.1097/ACM.0b013e31828acf27](https://doi.org/10.1097/ACM.0b013e31828acf27).
- Kasper, J., Greene, J. A., Farmer, P. E., & Jones, D. S. (2016). All health is global health, all medicine is social medicine: Integrating the social sciences into the preclinical curriculum. *Academic Medicine*, *91*, 628–632. doi:[10.1097/ACM.0000000000001054](https://doi.org/10.1097/ACM.0000000000001054).
- Kaye, D. K., Mwanika, A., & Sewankambo, N. (2010). Influence of the training experience of Makerere University medical and nursing graduates on willingness and competence to work in rural health facilities. *Rural and Remote Health*, *10*, 1372.
- Kumagai, A. K., & Lypton, M. L. (2009). Beyond cultural competence: Critical consciousness, social justice, and multicultural education. *Academic Medicine*, *84*, 782–787. doi:[10.1097/ACM.0b013e3181a42398](https://doi.org/10.1097/ACM.0b013e3181a42398).
- Larkins, S. L., Preston, R., Matte, M. C., Lindemann, I. C., Samson, R., Tandino, F. D., et al. (2013). Measuring social accountability in health professional education: Development and international pilot testing of an evaluation framework. *Medical Teacher*, *35*, 32–45. doi:[10.3109/0142159X.2012.731106](https://doi.org/10.3109/0142159X.2012.731106).
- Leinster, S. (2011). Evaluation and assessment of social accountability in medical schools. *Medical Teacher*, *33*, 673–676. doi:[10.3109/0142159X.2011.590253](https://doi.org/10.3109/0142159X.2011.590253).
- Lodenstein, E., Dieleman, M., Gerretsen, B., & Broerse, J. E. (2017). Health provider responsiveness to social accountability initiatives in low- and middle-income countries: A realist review. *Health Policy and Planning*, *32*, 125–140. doi:[10.1093/heapol/czw089](https://doi.org/10.1093/heapol/czw089).
- Maeshiro, R., Johnson, I., Koo, D., Parboosingh, J., Carney, J. K., Gesundheit, N., et al. (2010). Medical education for a healthier population: Reflections on the Flexner Report from a public health perspective. *Academic Medicine*, *85*, 211–219. doi:[10.1097/ACM.0b013e3181c885d8](https://doi.org/10.1097/ACM.0b013e3181c885d8).
- Marmot, M. (2005). Social determinants of health inequalities. *Lancet*, *365*, 1095–1104.
- Meili, R., Ganem-Cuenca, A., Leung, J. W., & Zaleschuk, D. (2011). The CARE model of social accountability: Promoting cultural change. *Academic Medicine*, *86*, 1114–1119. doi:[10.1097/ACM.0b013e318226adf6](https://doi.org/10.1097/ACM.0b013e318226adf6).
- Meurer, L. N., Young, S. A., Meurer, J. R., Johnson, S. L., Gilbert, I. A., & Diehr, S. (2011). The urban and community health pathway. *American Journal of Preventive Medicine*, *41*(suppl 4), S228–S236. doi:[10.1016/j.amepre.2011.06.005](https://doi.org/10.1016/j.amepre.2011.06.005).
- Michaels, D. C., Reid, S. J., & Naidu, C. S. (2014). Peer review for social accountability of health sciences education: A model from South Africa. *Education for Health (Abingdon)*, *27*, 127–131. doi:[10.4103/1357-6283.143728](https://doi.org/10.4103/1357-6283.143728).
- Morley, C. P., Mader, E. M., Smilnak, T., Bazemore, A., Petterson, S., Rodriguez, J. E., et al. (2015). The social mission in medical school mission statements: Associations with graduate outcomes. *Family Medicine*, *47*, 427–434.
- Mullan, F., Chen, C., Petterson, S., Kolsky, G., & Spagnola, M. (2010). The social mission of medical education: Ranking the schools. *Annals of Internal Medicine*, *152*, 804–811. doi:[10.7326/0003-4819-152-12-201006150-00009](https://doi.org/10.7326/0003-4819-152-12-201006150-00009).
- Murray, R. B., Larkins, S., & Russell, H. (2012). Medical schools as agents of change: Socially accountable medical education. *Medical Journal of Australia*, *196*(1–5), 51.
- National Academies of Sciences, Engineering, and Medicine. (2016). *A framework for educating health professionals to address the social determinants of health*. Washington, DC: The National Academies Press. doi:[10.17226/21923](https://doi.org/10.17226/21923).
- O'Brien, M. J., Garland, J. M., Murphy, K. M., Shuman, S. J., Whitaker, R. C., & Larson, S. C. (2014). Training medical students in the social determinants of health: The Health Scholars Program at Puentes de Salud. *Advances in Medical Education and Practice*, *5*, 307–314. doi:[10.2147/AMEP.S67480](https://doi.org/10.2147/AMEP.S67480).
- Pan American Health Organization. (2007). *Renewing Primary Health Care in the Americas: A position paper of the Pan American Health Organization/World Health Organization (PAHO/WHO)*.

- Washington DC: PAHO. Retrieved May 11, 2017 from <http://apps.who.int/medicinedocs/documents/s19055en/s19055en.pdf>.
- Panosian, C., & Coates, T. J. (2006). The new medical “missionaries”: Grooming the next generation of global health workers. *New England Journal of Medicine*, *354*, 1771–1773.
- Papp, S. A., Gogoi, A., & Campbell, C. (2013). Improving maternal health through social accountability: A case study from Orissa, India. *Global Public Health*, *8*, 449–464. doi:10.1080/17441692.2012.748085.
- Paradies, Y., Ben, J., Denson, N., Elias, A., Priest, N., Pieterse, A., et al. (2015). Racism as a determinant of health: A systematic review and meta-analysis. *PLoS ONE*, *10*, e0138511. doi:10.1371/journal.pone.0138511.
- Parsi, K., & List, J. (2008). Preparing medical students for the world: Service learning and global health justice. *Medscape Journal of Medicine*, *10*, 268.
- Pickett, K., & Wilkinson, R. (2014). Income inequality and health: A causal review. *Social Science and Medicine*, *128*, 316–326. doi:10.1016/j.socscimed.2014.12.031.
- Porter, D. (2006). How did social medicine evolve, and where is it heading? *PLoS Medicine*, *3*, e399. doi:10.1371/journal.pmed.0030399.
- Puschel, K., Rojas, P., Erazo, A., Thompson, B., Lopez, J., & Barros, J. (2014). Social accountability of medical schools and academic primary care training in Latin America: Principles but not practice. *Family Practice*, *31*, 399–408. doi:10.1093/fampra/cmu010.
- Quintana, F., Sarasa, N. L., Canizares, O., & Huguet, Y. (2012). Assessment of a complementary curricular strategy for training South African physicians in a Cuban medical university. *MEDICC Review*, *14*, 19–24.
- Reddy, A. T., Lazreg, S. A., Phillips, R. L., Jr., Bazemore, A. W., & Lucan, S. C. (2013). Toward defining and measuring social accountability in graduate medical education: A stakeholder study. *Journal of Graduate Medical Education*, *5*, 439–445. doi:10.4300/JGME-D-12-00274.1.
- Robert Wood Johnson Foundation. (2016). *How we work: Building a culture of health*. Retrieved May 11, 2017 from <http://www.rwjf.org/en/how-we-work/building-a-culture-of-health.html>.
- Schroeder, S. A., Zones, J. S., & Showstack, J. A. (1989). Academic medicine as a public trust. *Journal of the American Medical Association*, *262*, 803–812.
- Sharma, M., Pinto, A. D., & Kumagai, A. K. (2017). Teaching the social determinants of health: A path to equity or a road to nowhere? *Academic Medicine*. doi:10.1097/ACM.0000000000001689. [Epub ahead of print].
- Shaw, E. K., Howard, J., West, D. R., Crabtree, B. F., Nease, D. E., Jr., Tutt, B., et al. (2012). The role of the champion in primary care change efforts. *Journal of the American Board of Family Medicine*, *25*, 676–685. doi:10.3122/jabfm.2012.05.110281.
- Showstack, J., Fein, O., Ford, D., Kaufman, A., Cross, A., Madoff, M., et al. (1992). Health of the public. The academic response. Health of the Public Mission Statement Working Group. *Journal of the American Medical Association*, *267*, 2497–2502.
- South, J., & Phillips, G. (2014). Evaluating community engagement as part of the public health system. *Journal of Epidemiology and Community Health*, *68*, 692–696. doi:10.1136/jech-2013-203742.
- Starfield, B. (2006). State of the art in research on equity in health. *Journal of Health Politics, Policy and Law*, *31*, 11–32.
- Strasser, R., Hogenbirk, J. C., Minore, B., Marsh, D. C., Berry, S., McCready, W. G., et al. (2013). Transforming health professional education through social accountability: Canada’s Northern Ontario School of Medicine. *Medical Teacher*, *13*, 490–496. doi:10.3109/0142159X.2013.774334.
- Strasser, R., Worley, P., Cristobal, F., Marsh, D. C., Berry, S., Strasser, S., et al. (2015). Putting communities in the driver’s seat: The realities of community-engaged medical education. *Academic Medicine*, *90*, 1466–1470. doi:10.1097/ACM.0000000000000765.
- Strelnick, A. H., Swiderski, D., Fornari, A., Gorski, V., Korin, E., Ozuah, P., et al. (2008). The residency program in social medicine of Montefiore Medical Center: 37 years of mission-driven, interdisciplinary training in primary care, population health, and social medicine. *Academic Medicine*, *83*, 378–389. doi:10.1097/ACM.0b013e31816684a4.
- Stringhini, S., Sabia, S., Shipley, M., Brunner, E., Nabi, H., Kivimaki, M., et al. (2010). Association of socioeconomic position with health behaviors and mortality. *Journal of the American Medical Association*, *303*, 1159–1166. doi:10.1001/jama.2010.297.
- Training for Health Equity Network. (2011). *THEnet’s social accountability evaluation framework, Version 1, Monograph 1* (1st ed.). Retrieved May 11, 2017 from <http://thenetcommunity.org/wp-content/uploads/2013/05/The-Monograph.pdf>.
- Tyer-Viola, L., Nicholas, P. K., Corless, I. B., Barry, D. M., Hoyt, P., Fitzpatrick, J. J., et al. (2009). Social responsibility of nursing: A global perspective. *Policy, Politics, and Nursing Practice*, *10*, 110–118. doi:10.1177/1527154409339528.

- US Centers for Disease Control and Prevention. (2013). *Community health assessment for population health improvement: Resource of most frequently recommended health outcomes and determinants*. Atlanta, GA: Office of Surveillance, Epidemiology, and Laboratory Services. Retrieved May 11, 2017 from https://wwwn.cdc.gov/CommunityHealth/PDF/Final_CHAforPHL_508.pdf.
- Vanderbilt, A. A., Baugh, R. F., Hogue, P. A., Brennan, P. A., & Imran, I. (2016). Curricular integration of social medicine: A prospective for medical educators. *Medical Education Online*, *21*, 30586. doi:10.3402/meo.v21.30586.
- Ventres, W. B. (2017). Global family medicine: A 'UNIVERSAL' mnemonic. *Journal of the American Board of Family Medicine*, *30*, 104–108. doi:10.3122/jabfm.2017.01.160074.
- Ventres, W., & Dharamsi, S. (2015). Socially accountable medical education: The REVOLUTIONS framework. *Academic Medicine*, *90*, 1728. doi:10.1097/ACM.0000000000000872.
- Ventres, W., Dharamsi, S., & Ferrer, R. (2016). From social determinants to social interdependency: Theory, reflection, and engagement. *Social Medicine*, *11*(2), 84–89.
- Ventres, W. B., & Fort, M. P. (2014). Eyes wide open: An essay on engaged awareness in global medicine and public health. *BMC International Health and Human Rights*, *14*, 29. doi:10.1186/s12914-014-0029-4.
- Ventres, W., & Haq, C. (2014). Toward a cultural consciousness of self-in-relationship: From “us and them” to “we”. *Family Medicine*, *46*, 691–695.
- Ventres, W. B., & Wilson, C. L. (2015). Beyond ethical and curricular guidelines in global health: Attitudinal development on international service-learning trips. *BMC Medical Education*, *15*, 68. doi:10.1186/s12909-015-0357-7.
- Weiler, A. M., Hergesheimer, C., Brisbois, B., Wittman, H., Yassi, A., & Spiegel, J. M. (2015). Food sovereignty, food security and health equity: A meta-narrative mapping exercise. *Health Policy and Planning*, *30*, 1078–1092. doi:10.1093/heapol/czu109.
- Wolf, S. H., & Braveman, P. (2011). Where health disparities begin: The role of social and economic determinants—and why current policies may make matters worse. *Health Affairs (Millwood)*, *30*, 1852–1859. doi:10.1377/hlthaff.2011.0685.
- Woollard, R., Buchman, S., Meili, R., Strasser, R., Alexander, I., & Goel, R. (2016). Social accountability at the meso level: Into the community. *Canadian Family Physician*, *62*, 538–540.
- Zink, T., Halaas, G. W., Finstad, D., & Brooks, K. D. (2008). The rural physician associate program: The value of immersion learning for third-year medical students. *Journal of Rural Health*, *24*, 353–359. doi:10.1111/j.1748-0361.2008.00181.x.