

Wm. Marty Martin & Raj C. Shah

Working Paper No. 1 | March 2016

healthequitychicago.org

CENTER FOR COMMUNITY HEALTH EQUITY



Center for Community Health Equity

Our Working Papers Series aims to stimulate a wide-ranging conversation about community health. Papers will be posted periodically - sometimes preceding a seminar at the Center or at times following a presentation. We also commission working papers from colleagues in Chicago, the United States, and other countries. At the heart of the series are contributions from community-based organizations. The series encourages the exchange of ideas between different individuals and organizations. Inclusion of a paper in the series should not limit subsequent publication in any other venue.

Editorial Board:

Rush University Medical Center DePaul University

Lisa Barnes Jessica Bishop-Royse
Sharon Gates Douglas Bruce
Tricia Johnson Fernando De Maio
Chien-Ching Li Maria Ferrera
Beth Lynch Marty Martin
Raj Shah John Mazzeo

Suggested Citation

Martin, W.M. & Shah, R.C. (2016) The Role of Social Entrepreneurship in Achieving Health Equity. *Working Paper* No. 1. Center for Community Health Equity. Chicago, IL.

Copyright remains with the author(s). Reproduction for other purposes than personal research, whether in hard copy or electronically, requires the consent of the author(s).

For information on the Center for Community Health Equity and our Working Papers Series, Contact:

Fernando De Maio, PhD

DePaul University

Rush University Medical Center
990 W. Fullerton Ave., Suite 1100

Chicago, IL

60614

Chicago, IL

60612

fdemaio@depaul.edu Raj C Shah@rush.edu

Tel: 773-325-4431 Tel: 312-563-2902

The Role of Social Entrepreneurship in Achieving Health Equity

Wm. Marty Martin, PsyD, MPH, MA, MS, MSc 1 Raj C. Shah, MD 2

¹ Associate Professor & Director, Department of Management Driehaus College of Business, DePaul University 1 East Jackson Blvd. Chicago, IL. 60604 (630) 715-6270 martym@depaul.edu

² Associate Professor, Family Medicine and Rush Alzheimer's Disease Center Rush University Medical Center
600 South Paulina, Suite 1022, Chicago, IL 60612
(312) 563-2902
Raj C Shah@rush.edu

The Role of Social Entrepreneurship in Achieving Health Equity

Health equity is the goal of Center for Community Health Equity and its Design Core.

Technological advancements, an aging population, increasing media attention drawn to health topics, growing concerns about paying for healthcare, and passage of healthcare legislations such as the Affordable Care Act has placed health and healthcare on center stage in the United States and other nations. Health is not simply the absence of illness. In fact, the World Health Organization (WHO, 1946) defines health as follows: "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."

Whitehead (1991) describes health inequity as addressing unnecessary, avoidable, unfair and unjust differences. This definition has a moral and an ethical dimension. What is health equity? "Equity in health implies that ideally everyone should have a fair opportunity to attain their full health potential and, more pragmatically, that no one should be disadvantaged from achieving this potential, if it can be avoided" (WHO, 1986a). Given this definition of health equity, Whitehead (1991, page 220) posits that "Equity is therefore concerned with creating equal opportunities for health and with bringing health differentials down to the lowest level possible." We agree with these definitions and the goal of health equity as discussed above. Emanating from this overall goal of health equity, Leenan (1985) offers three objectives to achieve health equity: (1) equal access to available care for equal need; (2) equal utilization for equal need; and (3) equal quality of care for all. The "triple aim" of health equity also was described by Ehlinger (2015) as (1) expanding the understanding of what creates health, (2) taking a "health in all policies" approach with health equity as the goal, and (3) strengthening the capacity of communities to create their own healthy future.

Braveman (2006, page 167) argues that "Pursuing health equity means pursuing the elimination of such health disparities/inequalities." Differences in health and determinants of health based upon systematic social advantage or disadvantage among social groups such as racial/ethnic minorities and women are termed a health disparity/inequality. More specifically, Braveman (2006) uses discrimination as a synonym for persistently experienced social disadvantage. Banks and colleagues (2006) postulate that social determinants such as income inequality and substandard housing are responsible for such health disparities.

Burden of Disparities/Inequities

Disparities in access and health outcomes demand the attention of all stakeholders. As an illustration, Hunt and colleagues (2014) reported that there were 1710 excess Black deaths annually due to this disparity in breast cancer mortality. This amounts to 5 deaths every day from breast cancer mortality alone. Another illustration is diabetes mortality. One investigation found that Blacks had statistically significantly higher diabetes mortality rates compared to Whites in 39 of the 41 cities(Rosenstock, Whitman, West & Balkin, 2014). An illustration focusing on

suffering is the finding that ethnic and racial minorities report higher levels of pain in inpatient settings compared to Whites (Laguna, Goldstein, Braun & Enguidanos, 2014).

Beyond excess death and suffering, there are economic consequences. According to the Joint Center for Political and Economic Studies (2009), the economic burden of health disparities between 2003 and 2006 amounted to \$1.24 trillion. The elimination of these health inequalities among minorities during this same time period was forecasted to reduce indirect costs by more than \$1 trillion (ASTHO, 2013). Not only are there economic consequences, but the economy is correlated with changes in mental health care utilization. Specifically, one investigation found that emergency mental health utilization among African American youth increased one month after mass layoffs compared to non-Hispanic White youth (Bruckner, Kim & Snowden, 2014).

The addition of improved population health, patient experience, and improved value into the triple aim of health care has placed health care systems at the fulcrum for achieving health equity. However, the health care system in the United States today is not about "health," is not about "care," and is not a functioning "system." Conscious or not, the structural features of the current health care system create unjust practices that reduce the likelihood to achieve health equity. The consequences of failing to achieve health equity are too great to fail to identify solutions.

Health equity in the Triple Aim of Health Care

The conceptual cornerstone of health reform in this current era which was partially catalyzed by the passage of the Patient Protection and Affordable Care Act (ACA) is the Triple Aim. This conceptual framework posits that the healthcare delivery ought to pursue three aims: "... improving the individual experience of care; care; improving the health of populations; and reducing the per capita costs of care for populations" (Berwick, Nolan & Whittington, 2008, page 760). Prior to the formulation of the Triple Aim, the Institute of Medicine in 2001 published *Crossing the Quality Chasm: A New Healthcare System for the 21st Century* in which they promulgated six aims for quality improvement: (1) safe; (2) effective; (3) efficient; (4) timely; (5) patient centered; and (6) equitable.

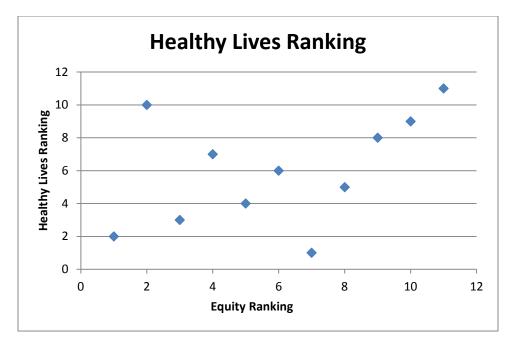
It has been argued that eliminating health disparities requires a dual focus: individual and racial/ethnic subpopulations (IOM, 2001; Ulmer, 2010). Equitable care is regarded as integral to the other five aims for quality improvement. Furthermore, "The goal of equitable care is to reduce overall mortality and accelerate the rate of decline in mortality for populations with disparities" (Rowley & Hogan, 2013, page 76). Berwick, Nolan and Whittington (2008) suggest that barriers to achieving the Triple Aim are both technical and political. Below we are proposing the conceptual relationships between health equity and each of the three Triple Aims using information in the most recent update of The Commonwealth Fund Mirror, Mirror on the Wall report (Davis, 2014). The report ranks the health care systems of 11 industrialized countries based on patient and physician survey results on care experiences and ratings on dimensions of

care including quality, access, efficiency, equity, healthy lives, and health expenditures. On measures of equity as defined by the likelihood of persons lower than the median income in the country to experience worse health care than persons at incomes higher than the country median income, the United States ranked last as compared to Australia, Canada, France, Germany, the Netherlands, New Zealand, Norway, Sweden, Switzerland, and the United Kingdom (Davis, 2014). As summarized in the report: "Americans with below-average incomes were much more likely than their counterparts in other countries to report not visiting a physician when sick; not getting a recommended test, treatment, or follow-up care; or not filling a prescription or skipping doses when needed because of costs. On each of these indicators, one-third or more of lower-income adults in the U.S. said they went without needed care because of costs in the past year." A recent empirical investigation in Canada demonstrated how the global financial crisis and the subsequent austerity measures worsened health equity (Ruckert & Labonte, 2014).

Health equity and population health

In The Commonwealth Fund report (Davis, 2014), the goal of a well-functioning health care system was defined as ensuring that "people lead long, healthy, and productive lives." Using three outcome indicators (mortality amenable to health care, infant mortality, and healthy life expectancy), the United States ranked last on each of the indicators. While equity rankings tended to correlate with healthy lives (i.e. the United States was last in both categories and Sweden ranked first in equity and second in healthy lives), it was not consistent as shown in Figure 1. France, which ranked best in healthy lives, was 7th in equity while the United Kingdom was 10th in healthy lives but 2nd in equity.

Figure 1. Healthy Lives Ranking as a function of Equity Ranking in The Commonwealth Fund Mirror, Mirror on the Wall 2014 Update.

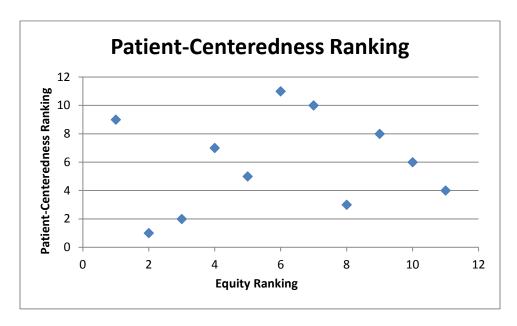


Source: Commonwealth Fund (2014).

Health equity and individual experience of care

In The Commonwealth Fund report, a ranking on the "patient-centeredness" of health care systems was performed utilizing three domains (provider-patient communications, physician continuity and feedback, and engagement and patient preferences). Patient-centeredness was defined as "care delivered with the patient's needs and preferences in mind." (Commonwealth Fund Commission, Why Not the Best?, 2011) Equity rankings were not fully correlated with patient-centeredness of the health care system (Figure 2). While the United States ranked last in equity, it did rank 4th in patient-centered care while Sweden ranked first in equity but 9th in patient-centered care. Differences were largely attributable to patient-centeredness in accessing continuous care versus receiving episodic patient-centered care. For instance, in the patient-physician communication domain, the United States' health system ranked first in clear instructions about symptoms to watch for and when to seek care after surgery or when leaving the hospital when it ranked 9 out of 11 on patients reporting always or often getting telephone answers from the doctor on the same day.

Figure 2. Patient-Centeredness Ranking as a function of Equity Ranking in The Commonwealth Fund Mirror, Mirror on the Wall 2014 Update.



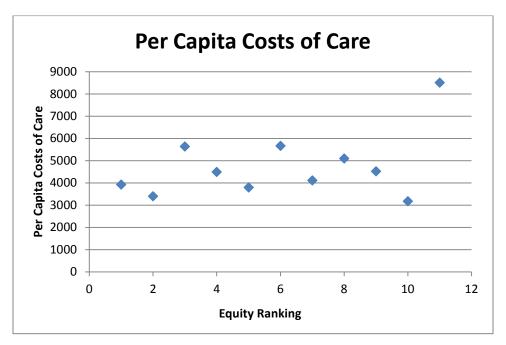
Source: Commonwealth Fund (2014).

Health equity and per capita costs of care for populations

According to The Commonwealth Fund report (Davis, 2014), the United States had the highest per capita costs of care in 2011 at \$8508 and the lowest equity ranking. In comparison,

the United Kingdom (which had the highest overall health system ranking and was 2 of out 11 in equity) had per capita costs of care of \$3405. There was a wide variation in the relationship between health equity and per capita costs of care with better equity not always being associated with lower per capita costs of care (Figure 3).

Figure 3. Per Capita Costs of Care as a function of Equity Ranking in The Commonwealth Fund Mirror, Mirror on the Wall 2014 Update.



Source: Commonwealth Fund (2014).

The associations of health equity with the triple aim of health care are complex and require further investigation. Other factors besides equity may be associated with attaining population health, the experience of care, and the per capita costs of care from a national health care system point of view. However, the rankings of the United States health care system as compared to other industrialized countries in the world highlights the need for system redesign. This redesign must represent a multi-level approach at each of the four levels: (1) patient experience; (2) clinical microsystem; (3) organizational; and (4) broader environment.

Designing a Health Care System to Achieve Health Equity

Current thinking suggests that a broader approach needs to be taken to achieve health equity. Health care markets are largely inefficient (Cutler, 2011). Organizational innovation has been touted as one way to reduce or eliminate these market inefficiencies (Cutler, 2011). Specifically, a community-based approach focusing upon the social determinants of health and disease is recommended as a way of not only achieving health equity but also enabling health care systems to meet their financial objectives as the reimbursement paradigm shifts from volume to value (Wong, LaVeist, & Sharfstein, 2015).

Since the publication of *Crossing the Quality Chasm* in 2001, a variety of efforts have been launched to achieve health equity. Interventions aimed at the levels of designing or redesigning the clinical microsystem, the organization, and the broader environment can lead to significant improvements. For instance, at Summa Health System, health outcomes such as improvements in HbA1c and blood pressure were documented over a two year intervention period (Scott, Gil, King & Piatt, 2015). However, the latent variable in each level is health equity. Addressing health equity in all levels may lead to a better health care system.

Our aim at the Center of Community Health Equity is to focus primarily upon one of the six dimensions, equity, but not to the exclusion of the other dimensions of performance and focus upon all four levels but with an emphasis on the clinical microsystem, organization and environment. To achieve this aim, a social entrepreneurship approach will be utilized to develop the capacity of students, faculty, residents, and other key stakeholders.

Social Entrepreneurship: A Process to Achieve Health Equity

In retrospect, examples of social entrepreneurship may be found throughout history. However, the term, *social entrepreneurship*, was used first in the literature on social change in the 1960s and 1970s (Banks 1972). In the 1980s and 1990s, the term became used more often (Leadbeater, 1996). While definitions vary, social entrepreneurship is "exercised where some person or persons (1) aim either exclusively or in some prominent way to create social value of some kind, and pursue that goal through some combination of (2) recognizing and exploiting opportunities to create this value, (3) employing innovation, (4) tolerating risk and (5) declining to accept limitations in available resources" (Peredo, 2005, page 2).

Drayton, Brown and Hillhouse (2006) discuss the merits of applying a social entrepreneurship approach to achieving 'health for all' by writing, "Challenging the health sector in their inventive, opportunistic way, social entrepreneurs are particularly good at identifying and engaging the entire cast of characters necessary to effect change on a scale that develops its own momentum and staying power (page 591)." The gap between policy and practice can in part be closed by developing and deploying low-cost solutions (Haines, Kuruvilla & Borchert, 2004). Social entrepreneurs work with people living with poverty and marginalized people to identify solutions to prevent and address their most pressing challenges (Catford, 1998). This focus on social entrepreneurship is not distinct from a focus on commercial entrepreneurship in that both types of entrepreneurs share similar characteristics (Thake & Zadek, 1997).

Social entrepreneurship has been positioned as an approach to address not just market failures but also societal failures (Wei-Skillern, 2010). The persistent gaps in health outcomes represent a social failure. Healthcare systems have not rapidly adopted innovation and entrepreneurship outside of the realm of the patient experience with regard to diagnosing, treating, and managing care. Four barriers have been identified to entrepreneurship in healthcare organizations: structural; economic; organizational; and behavioral (Phillips & Garman,

2005/2006). Compared to other industries, Hwang and Christensen (2008) conclude that healthcare delivery as an industry has been slow to innovate, especially as it relates to innovation that changes fundamental paradigms. The benefits of innovation that address the structural, economic, organization, and behavioral barriers are improvements in affordability and convenience (Hwang & Christensen, 2008). These two benefits are applicable to achieving health equity, also.

Despite these four barriers, Phillips and Garman (2005/2006) contend that entrepreneurship is required to identify alternative sources of revenue, control costs, and deliver higher value in three areas: care, education and research. Each of these three areas is well aligned with the vision of the Center of Community Health Equity to reduce hardship and improve health outcomes. Technological innovation may increase costs in the short run but demonstrate a cost: benefit in the long run (Gottlieb & Makower, 2013).

Adopting social entrepreneurial practices in a hospital system resulted in financial value creation and fulfillment of the social mission (Liu, Lu & Guo, 2014). Specifically, it was found that top management team support along with a market orientation were key inputs to creating the following intentional outputs: social capital creation; enterprise value creation; and social/financial value creation (Liu, Lu & Guo, 2014). With constraints on health care funding, French and Miller (2012) posit that a new model is necessary which they term the 'entrepreneurial hospital.' In the 'entrepreneurial hospital,' there is an emphasis on regarding patients and communities as human capital and a search for mobilizing publicly-funded health care in new ways (French & Miller, 2012). An entrepreneurial focus has even been suggested within local health departments as a way of stabilizing volatile government public health funding (Jacobson, Wasserman, Wu, & Lauer, 2014). Social entrepreneurship only is limited by the entrepreneurial capacity of leaders, manager and other members of the healthcare workforce including physicians.

Nurturing Social Entrepreneurial Skills in the Health Sciences

The challenges and opportunities confronting policy makers and organizational leaders in healthcare and public health settings demand a new set of skills. Johnson, Sabol and Baker (2006) assert that "Public health leaders and managers need new leadership and management skills as well as greater entrepreneurial acumen to respond effectively to broad demographic, socioeconomic, and political trends reshaping public health' (page 419). The case will be made here that this claim is applicable to all healthcare leaders not just those in public health. Entrepreneurial education in graduate-level health science programs is a necessity rather than an elective. Dzau and colleagues (2013) assert that "Innovation is now a need, not a want" (page 1428). Guo (2006) outlines the responsibilities of entrepreneurial leaders in healthcare as being "...responsible for creating innovations, managing change, investing in resources, and recognizing opportunities in the environment to increase organizational viability" (page 504).

Given the need for entrepreneurs in health care to address some of the industry and organizational challenges, the next question is what the role of institutions that educate healthcare leaders. It has been argued by some that there is a role to educate health care professionals in entrepreneurship (Salminen et al., 2014). Guo (2009) categorizes the core competencies of an entrepreneurial health care leader in three domains: (1) health care system and environment competencies; (2) organization competencies; and (3) interpersonal competencies. These competencies are relatively well aligned with the multi-level approach described above. The required knowledge and skills to function as an entrepreneur and apply entrepreneurial thinking to achieving health equity goes beyond the traditional healthcare curriculum. Given the multidisciplinary nature of entrepreneurship education, curriculum and instructional designers must borrow core technologies from other professions. Miron-Shatz, Shatz, Becker, Patel and Eysenbach (2014) recommend that seven knowledge domains/skills enhance the entrepreneurial capacity of health care professionals. These seven include the following: (1) translate product/service into a company; (2) identify the market forces and define the target market; (3) determine your competitive advantage; (4) write a business plan; (5) resource your plan now and in the future; (6) address the legal and regulatory issues; and (7) master the skill of pitching. All of these knowledge domains/skills can be learned.

Center for Community Health Equity Design Core

Over the last 10 years, there has been a movement in education to focus on developing the next generation of learners to be innovators. While most of the innovation has focused on the design of novel products, there is another equally important route for innovation. Social innovation involves learning how to develop sustainable programs to improve the quality of life and well-being of individuals and communities. Social innovators are interested in making change that reduces social injustice. Social innovation has been part of the fabric of Chicago since the early 20th Century. Innovators such as Jane Adams made significant differences in the knowledge acquisition in newly established communities. Chicago also was the hub of social innovation funded through private donors.

Many persons entering careers in the health workforce are driven by a hope to make a difference in the well-being of society. How can that internal drive be accentuated in the process of educating and training the next generation of health workforce? How can they develop the skills of social innovation?

The Design Core (http://www.healthequitychicago.org/#!designcore/c1bpt) has an overall aim of developing social innovation programs to achieve health equity. This activity will require student and faculty members to engage with community stakeholders in order to translate what is learned in the Discovery Core activities into impactful action. An ancillary aim is to transform student-led community engagement activities into effective interprofessional service-learning opportunities. Specific aims include:

- a. Enabling the health work force to nurture intrinsic motivation in their choice of profession through play, passion, and purpose.
- b. Combining motivation with expertise and creative thinking skills to enable the rapid design and evaluation of innovative solutions to advance health equity
- c. Developing a social entrepreneur culture through strong mentor-mentee relationships, interprofessional teamwork, and continuous service learning.

Through the work of the Design Core, the communities will benefit from new solutions to advance health equity, students of the health workforce have a foundation of life-long learning skills to make a difference in society, and the Center for Community Health Equity will be recognized as a novel program in the development of social innovations focused on health and well-being. The desired impact, planned outputs, and short, mid, and long-range goals are provided in Table 1.

Over the course of the next year, our work will focus on building our capacity to achieve this vision. Specifically, existing Rush Medical School student-led organizations will be evaluated to assess their impact and potential to have a greater impact as well as be more self-sustaining. In addition, Rush Medical students and DePaul students will be given the opportunity to participate in a course tilted "Social Entrepreneurship to Accelerate Health Equity." Rush and DePaul students will be given the opportunity to participate in a study to assess Entrepreneurship Intentions and Entrepreneurial Self-Efficacy to harness the collective intent to either bolster existing student-led organizations, scale existing programs or launch new ventures aimed at accelerating health equity.

Table 1. Drivers to Achieving Center for Community Health Equity Design Core Aims.

Desired Impact:

- (1)Recognition of the Center as a national model for developing social innovation in the health workforce to advance health equity;
- (2) Knowledge, attitudes, and skills for continuous social innovation in health work force graduates;
- (3) Community improvement in hardship and health equity measures;
- (4) Transform student-led volunteer activities into service learning experiences and then novel not-for-profit community entities;
- (5) Attract a more diverse student body with interests in social innovation on health equity

Planned Outputs:

- (1) Enabling the health work force nurture intrinsic motivation in their choice of profession through play, passion, and purpose;
- (2) Combining motivation with expertise and creative thinking skills to enable the rapid design and evaluation of innovative solutions to advance health equity;
- (3) Developing a social entrepreneur culture through strong mentor-mentee relationships, interprofessional teamwork, and continuous service learning.
- (4) Adding research methodology to design via interdisciplinary approach

Short Term Outcomes (1-2 years):

- (1) Develop a curriculum for design thinking for health equity;
- (2) Catalog and assess the social innovation potential of current health work force student-led programs at DePaul University and Rush University;
- (3) Conduct an environmental survey on other programs to develop service learning and social innovation in health and health equity.

Mid Term Outcomes (3-4 years):

- (1) Embed service learning and social entrepreneurship principles into student led community activities
- (2) Consult with MBA program at DePaul University for taking social innovation ideas into sustainable community implementation;
- (3) Develop pathways to bring social innovation ideas to the community marketplace

Long Term Outcomes (5 years and beyond):

- (1) Sustainable community based social innovations to address health equity;
- (2) Scholarly activity on developing social innovators in the health workforce;
- (3) HRSA and other federally funded grant support

References

ASTHO (2013). The economic case for health equity. Issue Brief. http://www.astho.org/Programs/Health-Equity/Economic-Case-Issue-Brief/

Banks J, ed. (1972). The Sociology of Social Movements. London, MacMillan

Banks, J., Marmot, M., Oldfield, Z., & Smith, J. P. (2006). Disease and disadvantage in the United States and in England. *JAMA*, 295(17), 2037-2045.

Beal, A. C. (2011). High-quality health care: the essential route to eliminating disparities and achieving health equity. *Health Affairs*, *30*(10), 1868-1871.

Berwick, D. M., Nolan, T. W., & Whittington, J. (2008). The triple aim: care, health, and cost. *Health Affairs*, 27(3), 759-769.

Braveman, P. (2006). Health disparities and health equity: concepts and measurement. *Annu. Rev. Public Health*, 27, 167-194.

Bruckner, T., Kim, Y. & Snowden, L. (2014). Racial/ethnic disparities in children's emergency mental health after economic downturns. Administration and Policy in Mental Health and Mental Health Services Research, 41 (3), 334-342.

Catford, J. (1998). Social entrepreneurs are vital for health promotion-but they need supportive environments too. Health Promotion International, 13 (2), 95-97.

The Commonwealth Fund Commission on a High Performance Health System, (2011). Why Not the Best? Results from the National Scorecard on U.S. Health System Performance, 2011. The Commonwealth Fund.

Cutler, D. M. (2011). Where are the health care entrepreneurs? The failure of organizational innovation in health care. In *Innovation Policy and the Economy, Volume 11* (pp. 1-28). University of Chicago Press.

Davis, K, Stremikis K, Squires D, et al. (2014). Mirror, mirror on the wall (2014 update). The Commonwealth Fund pub no. 1755.

Drayton, W., Brown, C. & Hillhouse, K. (2006). Integrating social entrepreneurs into the "health for all" formula. Bulletin of the World Health Organization, 84 (8), 591.-592.

Dzau, V.J., Yoediono, Z., ElLaissi, W.F. & Cho, A.H. (2013). Fostering innovation in medicine and health care: What must academic health centers do? Academic Medicine, 88 (10), 1424-1429.

Eddy, J.M. & Stellefson, M.L. (2008). Entrepreneurship in health education and health promotion: Five cardinal rules. Health Promotion Practice, 1-8.

Ehlinger, E.P. (2015). We need a triple aims for health equity. Minnesota Medicine, 28-29.

French, M., & Miller, F. A. (2012). Leveraging the "living laboratory": on the emergence of the entrepreneurial hospital. *Social Science & Medicine*, 75(4), 717-724.

Gottlieb, S. & Makower, J. (2013). A role for entrepreneurs: an observation on lowering healthcare costs via technology innovation. American Journal of Preventive Medicine, 44 (1), S43-S47.

Guo, K.L. (2009). Core competencies of the entrepreneurial leader in health care organizations. The Health Care Manager, 28 (1), 19-29.

Guo, K.L. (2006). Entrepreneurship management in health services: An integrative model. Journal of Health and Human Services Administration, 28 (4), 504-530.

Haines, A., Kuruvilla, S. & Borchert, M. (2004). Bridging the implementation gap between knowledge and action for health. Bulletin of the World Health Organization, 82, 724-733.

Hunt, B. R., Whitman, S., & Hurlbert, M. S. (2014). Increasing Black: White disparities in breast cancer mortality in the 50 largest cities in the United States. *Cancer Epidemiology*, *38*(2), 118-123.

Hussein, C.A. et al. (2014). Working with communities to achieve health equity in Maryland's five health enterprise zones. Journal of Health Care for the Poor and Underserved, 25, 4-10.

Hwang, J., & Christensen, C. M. (2008). Disruptive innovation in health care delivery: a framework for business-model innovation. *Health Affairs*, 27(5), 1329-1335. Institute of Medicine (2001). Crossing the Quality Chasm: A New Health System for the Twenty-first Century. Washington: National Academy Press.

Institute of Medicine Committee on Quality of Health Care in America: Crossing the Quality Chasm: A New Health System for the 21st Century. Washington DC, National Academy Press, 2001

Jacobson, P. D., Wasserman, J., Wu, H. W., & Lauer, J. R. (2015). Assessing Entrepreneurship in Governmental Public Health. *American Journal of Public Health*, 105(S2), S318-S322.

Johnson, J.H., Sabol, B.J. & Baker, E.L. (2006). The crucible of public health practice: major trends shaping the design of the Management Academy for Public Health. Journal of Public Health Management, 12 (5), 419-425.

Joint Center for Political and Economic Studies (2009). The economic burden of health inequalities in the United States, 2009. http://www.jointcenter.org/research/the-economic-burden-of-health-inequalities-in-the-united-states.

Laguna, J., Goldstein, R., Braun, W., & Enguídanos, S. (2014). Racial and ethnic variation in pain following inpatient palliative care consultations. *Journal of the American Geriatrics Society*, 62(3), 546-552.

Leadbeater, C. (1996) The Rise of the Social Entrepreneur. Demos, London.

Leenan, H. (1985) Equality and Equity in Health Care. Paper presented at the WHO/Nuffield Centre for Health Service Studies meeting, Leeds, 22-26 July 1985.

Liu, S. S., Lu, J. F., & Guo, K. L. (2014). Using a social entrepreneurial approach to enhance the financial and social value of health care organizations. *Journal of Health Care Finance*, 40(3), 31-46.

Marmot, M., & Allen, J. J. (2014). Social determinants of health equity. American Journal of Public Health, 104(S4), S517-S519.

Miron-Shatz, T., Shatz, I., Becker, S., Patel, J., & Eysenbach, G. (2014). Promoting business and entrepreneurial awareness in health care professionals: Lessons from venture capital panels at Medicine 2.0 conferences. Journal of Medical Internet Research, 16 (8),

Orton, S., Umble, K.E., McIver, J. & Menkens, A.J. (2006). The Management Academy for Public Health: program design and critical success factors. Journal of Public Health Management & Practice, 12 (5), 409-418.

Peredo A.M & McLean M. (2005). Social entrepreneurship: a critical review of the concept. The Journal of World Business.

Phillips, F.S. & Garman, A. (2005/2006). Barriers to entrepreneurship in healthcare organizations. Journal of Health and Human Services, 28 (3/4), 472-484.

Rosenstock, S., Whitman, S., West, J.F. & Balkin, M. (2014). Racial disparities in diabetes mortality in the 50 most populous U.S. cities. Journal of Urban Health, 91 (5), 873-885.

Rowley, D. L., & Hogan, V. (2012). Disparities in infant mortality and effective, equitable care: are infants suffering from benign neglect?. *Annual Review of Public Health*, 33, 75-87.

Ruckert, A., & Labonté, R. (2014). The global financial crisis and health equity: Early experiences from Canada. Global Health, 10(2).

Salminen, L., Lindberg, E., Gustafsson, M.L., Heinonen, J. & Leino-Kilpi, H. (2014). Entrepreneurship education in health care education. Education Research International.

Scott, E. D., Gil, K., King, B. C., & Piatt, E. (2015). Clinical Outcomes in a Primary Care Practice within a Center for Health Equity. Journal of Primary Care & Community Health,

Thaker, S. & Zadek, S. (1997). Practical people noble causes: How to support community-based social entrepreneurs. New Economic Foundation. London.

Ulmer, C., Bruno, M., Burke, S., eds. (2010) Future Directions for the National Healthcare Quality and Disparities Reports. Committee on Future Directions for the National Healthcare Quality and Disparties Reports. Washington, DC: Natl. Acad. Press. 246pp.

Umble, K.E., Orton, S., Rosen, B. & Ottoson, J. (2006). Evaluating the impact of the Management Academy for Public Health: developing entrepreneurial managers and organizations. Journal of Public Health Management & Practice, 12(5), 436-445.

Wei-Skillern, J. (2010). Networks as a type of social entrepreneurship to advance population health. Preventing Chronic Disease: Public Health Research, Practice and Policy. http://www.cdc.gov/pcd/issues/2010/nov/10_0082.htm

White House Summit on Achieving eHealth Equity (2013).

Whitehead, M. (1991). The concepts and principles of equity and health. *Health Promotion International*, 6(3), 217-228.

WHO (1986a) Social Justice and Equity in Health: Report on a WHO Meeting. (Leeds, United Kingdom, 1985) (ICP/HSR/ 8O4/mO2), WHO Regional Office for Europe, Copenhagen.

WHO (1946). Preamble to Constitution of WHO, adopted by International Health Conference, New York, June 19-22, 1946

Wong, W. F., LaVeist, T. A., & Sharfstein, J. M. (2015). Achieving health equity by design. JAMA, 313(14), 1417-1418.