Improving Quality, Achieving Equity, and Increasing Diversity in Healthcare: The Future is Now

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ABSTRACT

Racial and ethnic disparities in health and healthcare are a longstanding and well-understood crisis in the United States. The root causes are multifactorial and include provider/patient communication challenges, stereotyping and its impact on clinical decisionmaking, and patient mistrust. The passage of healthcare reform and current efforts to achieve payment reform signal the beginning of a major transformation of the US healthcare system that will require greater attention to improving quality, addressing disparities, and achieving equity given that minorities will comprise approximately 48% of the 32 million newly insured. The Institute of Medicine Report Unequal Treatment serves as the nation's blueprint to address disparities, and one major recommendation was increasing the proportion of underrepresented minorities in the healthcare workforce. This article provides an overview of the root causes of disparities, key drivers that will spur action, and a path forward to achieve diversity that includes observations from the field and promising practices. Ultimately, a healthcare workforce that reflects our nation's increasingly diverse population will be vital if we are to deliver high-quality care to all.

Keywords: disparities ▪ diversity ▪ equity ▪ healthcare ▪ healthcare workforce

INTRODUCTION

Racial and ethnic disparities in health and healthcare

Racial and ethnic disparities in health are a longstanding and well-understood crisis in the United States. Research has shown that compared to their white counterparts, minority Americans suffer disproportionately from such preventable and treatable conditions as cardiovascular disease, asthma, cancer, and HIV/AIDS, among others (Department of Health and Human Services [DHHS], 1998). Diabetes, a current health epidemic, is a perfect example of this problem: minorities are significantly more likely to be diagnosed with, and die from, this condition, than the majority population.

Social determinants—lower levels of education, overall lower socioeconomic status, living in unsafe neighborhoods, and "fresh food deserts"—disproportionately plague minority populations and contribute to their poorer health outcomes (Antonovsky, 1968; Byrd, 1990; Hinkle et al., 1968; Pincus & Callahan, 1995; Pincus, Esther, DeWalt, & Callahan, 1998; Widener, Metcalf,& Bar-Yam, 2012; Williams, 1990; Williams, Yu, Jackson, & Anderson, 1997). For example, if a patient with diabetes works two jobs or lives in a neighborhood that has no sidewalks or affordable gyms or where walking at night is unsafe, exercising regularly becomes exceedingly difficult. Similarly, if patients are supposed to eat fresh fruits and vegetables, but those available in their neighborhood cost more and are less fresh, following a healthy diet becomes difficult. Lack of access to care also takes a significant toll. Uninsured individuals are less likely to have a regular source of care and more likely to report delaying seeking care and not receiving needed care—all resulting in avoidable hospitalizations, emergency hospital care, and adverse health outcomes (Andrulis, 1998; DHHS, 1998; No Health Insurance, 2000).

To further complicate matters, the Institute of Medicine (IOM) report Unequal Treatment found that even with the same insurance and socioeconomic status, and controlling for comorbidities, stage of presentation, and other confounders, minorities often receive lower quality healthcare than their white counterparts (2003). The Agency for Healthcare Research and Quality's annual National Healthcare Disparities Report documents the persistence of these trends (2011). Examples directly link lapses in care with significant clinical consequences to known racial/ethnic disparities in health outcomes.

Root causes for racial/ethnic disparities in healthcare

Several aspects of clinical practice may lead to racial/ethnic disparities. Three stand out: provider/patient communication, clinical decisionmaking, and mistrust.

Provider/Patient communication

A growing literature delineates the impact of sociocultural factors, race, ethnicity, and limited-English proficiency on health and clinical care (IOM, 2003). Healthcare professionals cannot ignore diversity, as patients present varied perspectives, values, beliefs, and behaviors regarding health and well-being. They differ in their recognition of symptoms, thresholds for seeking care, comprehension of management strategies, expectations of care, including preferences for or against diagnostic and therapeutic procedures, and adherence to preventive measures and medications. These sociocultural differences between patient and provider influence communication and clinical decisionmaking and are especially pertinent given evidence linking provider/patient communication to patient satisfaction, adherence, and subsequent health outcomes (Haynes, 1976; Stiles, Putnam, Wolf, & James, 1979). When they are not appreciated, explored, understood, or communicated effectively in the medical encounter, patient dissatisfaction, poor adherence, poorer health outcomes, and racial/ethnic disparities in care may result (Betancourt, Carrillo, & Green, 1999; Brach & Fraser, 2000; Crane, 1997; Hornberger, 1997; Langer, 1999; Morales, Cunningham, Brown, Liu, & Hays, 1999; Phillips, 2000).

905

Communication challenges can be complex and due to cultural factors, general and health literacy, as well as mistrust, and go well beyond language barriers. That being said, the evidence is quite clear in this very obvious area. With even a minimal language barrier, provider/patient communication without an interpreter is recognized as a major challenge to effective healthcare delivery (Carrasquillo, Orav, Brennan, & Burstin, 1999; Erzinger, 1991; Perez-Stable, Napoles-Springer, & Miramontes, 1997; Seijo, Gomez, & Freidenberg, 1991). Research has shown that Spanish-speaking patients discharged from the emergency room are less likely than their English-speaking counterparts to understand their diagnosis, prescribed medications, special instructions, and plans for follow-up care (Crane, 1997). Furthermore, limited-English proficient patients are more likely to report problems with their care and are less satisfied with the patient/provider relationship (Carrasquillo et al., 1999); they are more likely to omit medication, miss office appointments, and visit the emergency room for care (Hornberger, 1997). They and racial/ethnic minorities are more likely than their English-speaking white counterparts to suffer adverse events, which tend to have greater clinical consequences (Andrulis, 1998; DHHS, 1998; *No Health Insurance?*, 2000). These patients also have longer hospital stays for some common medical and surgical conditions than their white counterparts (Harris, Andrews, & Elixhauser, 1997).

On the other hand, limited-English proficient patients with access to interpretation services during their medical visit report a similar quality of care to those with language-concordant providers (Saha, Komaromy, Koepsell, & Bindman, 1999). The link between the effectiveness of communication in the clinical encounter to health outcomes likely contributes to racial/ethnic disparities in health and healthcare.

Clinical decisionmaking and stereotyping

Many nonmedical factors, ranging from the patient's physical appearance to the organizational setting in which medical care is delivered, may have as much influence on clinical decisions as the actual signs and symptoms of disease (Hooper, Comstock, Goodwin, & Goodwin, 1982; McKinlay, Potter, & Feldman, 1996). In addition to symptoms and probability of disease, clinical decisions are shaped by patient age, gender, socioeconomic status, race/ethnicity, language proficiency, and insurance status; the doctor's specialty, level of training, clinical experience, age, gender, and race/ethnicity; and features of the practice setting, including location, organization of practice, form of compensation, performance expectations, and incentives (Chen, Rathore, Radford, Wang, & Krumholz, 2001; Cooper-Patrick et al., 1999; Einbinder & Schulman, 2000; Eisenberg, 1979; Finucane & Carrese, 1990; Morales et al., 1999; Rathore et al., 2000; Schulman et al., 1999; van Ryn & Burke, 2000; Weisse, Sorum, Sanders, & Syat, 2001; Wennberg, 1999).

The literature on social cognitive theory has also brought to our attention the ways in which natural tendencies to stereotype may influence clinical decisionmaking. Every day, we are faced with enormous amounts of information that we must sift through in order to make decisions. As a result, we all share the subconscious strategy of attempting to simplify our decisionmaking process and lessen our cognitive effort by using "categories" or "stereotypes," applying beliefs and expectations about groups of people to individuals from that group (Fiske, 1998; Fiske & Taylor, 1991). We may not be aware of our attitudes or consciously endorse stereotyping. Nevertheless, when individuals are mentally assigned to a particular class or group, the characteristics assigned to that group are subconsciously and automatically applied to the individual. It should be emphasized that this cognitive process is normal, functional, adaptive, often automatic, and most likely centered on (in rank order) race, gender, and age—characteristics that are visible (Fiske, 1998). Most important, we tend to activate stereotypes most when we are stressed, multitasking, and under time pressure—the hallmarks of the clinical encounter.

Differentiating stereotyping from prejudice and discrimination, both conscious processes, is important. Prejudice is conscious, knowledgeable prejudgment of individuals that may lead to disparate treatment; discrimination is conscious and intentional disparate treatment (Fiske, 1998). We all stereotype naturally and often subconsciously, despite our best intentions to treat every patient equitably and as an individual. Left unchecked, stereotyping has a detrimental clinical effect on groups who fall into specific categories deemed less worthy of diagnostic or therapeutic procedures or resources (Geiger, 2001; Macrae, Miln, & Bodenhausen, 1994). For example, one study found that as physicians' implicit pro-white bias increased, so did the likelihood that they would treat white patients, not black patients, with thrombolysis (Green et al., 2007). Although stereotyping is natural and expected, its effect on clinical decisionmaking can exacerbate racial and ethnic healthcare disparities.

Mistrust

Trust is a crucial element of the therapeutic alliance between patient and healthcare provider. It facilitates open communication and is directly correlated with adherence to physician recommendations and patient satisfaction (Peterson et al., 1997). Patients who mistrust their healthcare providers are less satisfied with the care they receive (Thom, 1997), and mistrust of the healthcare system greatly affects their use of services. Lack of confidence in physicians results in inconsistent care, doctor shopping, self-medicating, and increased patient demand for referrals and diagnostic tests (Collins, Hall, & Neuhaus, 1999).

Based on the historical factors of discrimination, segregation, and medical experimentation, African-Americans may be especially mistrustful of providers (Gamble, 1997). US Public Health Service exploitation of African-Americans in the Tuskegee study left a legacy of mistrust that persists even today (Gamble, 1997). African-Americans report less trust in their healthcare providers and are more likely to perceive discrimination in healthcare (Kaiser Foundation, 2005). Any effort to eliminate disparities in clinical practice will have to account for mistrust—and building trust—in the medical encounter.

907

THE CURRENT CONTEXT: KEY DRIVERS TO ADDRESS DISPARITIES

The passage of healthcare reform and current efforts to achieve payment reform signal the beginning of a major transformation of the US healthcare system. An entire new set of structures is developing to expand access to cost-effective, high-quality care: value-based purchasing, accountable care organizations (ACOs), financial disincentives for hospital readmissions and medical errors, payment for patient experience, meaningful use, and focus on care transitions and population and management. Guided by *Crossing the Quality Chasm*, our nation charts a path toward safe, efficient, effective, timely, patient-centered, and *equitable* healthcare (IOM, 2001). However, *equity*—the principle that quality of care should not vary based on patient characteristics, such as race/ethnicity—has received less attention than other areas, such as safety, despite evidence that the factors contributing to disparities result in more medical errors with greater clinical consequences (Betancourt, 2006; Cohen, Rivara, Marcuse, McPhillips, & Davis, 2005; Divi, Koss, Schmaltz, & Loeb, 2007; Flores et al., 2003), prolonged hospital stays (John-Baptiste et al., 2004), avoidable hospitalizations and readmissions (Alexander, Grumbach, Remy, Rowell, & Massie, 1999; Ash & Brandt, 2006; Jiang, Andrews, Stryer, & Friedman, 2005; Rathore et al., 2003) and over- and underuse of procedures (Bickell et al., 2006; Crocker et al., 2009; Epstein et al., 2000). Researchers have determined that between 2003 and 2006, the combined direct and indirect cost of health disparities in the US was $1.24 trillion (LaVeist, Gaskin, & Richard, 2009). The problem takes on greater importance given that minorities will comprise 48% of the 32 million newly

insured individuals entering the system as a result of healthcare reform (Robert Wood Johnson Foundation).

Accreditation and quality measurement are powerful means to address disparities. The Joint Commission, which accredits hospitals, has advanced effective communication, cultural competence, and patient- and family-centered care by developing standards for the hospital program. The National Quality Forum has also developed measures of cultural competence (2009) and disparities (Weissman et al., 2012) that should drive change in hospital performance related to disparities and equity.

Charting a path forward: the importance of diversity in healthcare

More than ten years ago, the IOM report Unequal Treatment (2003) provided a set of recommendations for addressing and eliminating racial/ethnic disparities in healthcare that are still being acted upon today. They include:
- increase healthcare providers' awareness of racial/ethnic disparities in healthcare;
- improve care systems by collecting data on patient race/ethnicity, improving quality, using evidence-based guidelines and multidisciplinary teams, and reaching out to the community;
- facilitate interpretation services to address language barriers in the clinical encounter;
- educate health providers in health disparities, cultural competence, and the impact of race/ethnicity on clinical decisionmaking; and
- empower patients to be more active in the clinical encounter, and more effectively navigate the health care system.

It also recommends increasing the proportion of underrepresented minorities in the healthcare workforce. Research has documented that despite comprising almost 35% of the population, minorities make up 5% of dentists, 14% of nurses, 17% of city and county public health officials, and 16% of public health school faculty (Collins, Hall, & Neuhaus, 1999). Recent data from the Association of American Medical Colleges (AAMC, 2010) indicate that of the 60% of US physicians whose race and ethnicity are known, Latinos make up 5.5%, African-Americans 6.3%, and American Indian and Alaskan Natives less than 0.6%. Data regarding the racial/ethnic composition of medical school faculty is no different, with minorities composing only 21.5% nationally (AAMC, 2012). Approximately 20% of this group are located at three historically black medical schools and three Puerto Rican medical schools accredited by the Liaison Committee on Medical Education (AAMC, 2005). In terms of the future healthcare workforce, despite composing 34% of the overall US population, minority students accounted for only 12.3% of medical school graduates between 1975-2008 (AAMC, 2010).

Unequal Treatment was followed by *In the Nation's Compelling Interest: Ensuring Diversity in the Healthcare Workforce* (IOM, 2004).It concluded that increasing racial and ethnic diversity among health professionals is important based on evidence associating it with improved access to care for racial and ethnic minority patients, greater patient choice and satisfaction, better educational experiences for health professions students, more diverse perspectives in the training environment, and expanding the pool of individuals who are skilled at caring for diverse populations. More important, it highlighted what achieving diversity is and what it isn't. It is not a call to lower medical school admission standards or achieve quotas. Instead, admission criteria and standards should be reexamined to assure that:

(1) the Medical College Admissions Test (MCAT) is fair, well-balanced, and a true predictor of success as a *physician*, not just success in the first two years of medical school;

(2) they take into account a broader set of characteristics, including resilience, overcoming adversity, and "distance travelled" (life trajectory), as they are equally likely to predict success in medicine as other factors held as gold standards today; and

(3) they meet society's need for clinicians who are well-rounded, communicate well, and can deliver quality care to diverse populations.

909

Achieving diversity: observations from the field

To date, efforts to achieve diversity in the health professions have consistently failed. Perhaps the most striking example was the AAMC's Project 3000 by 2000, which aimed to see 3000 underrepresented minorities enrolled in US medical schools by the year 2000 (Petersdorf, 1992). Despite a robust portfolio of national initiatives, the goal was not achieved. Why? While many point to the limited "educational pipeline", which should deliver qualified minority applicants to medical schools and which is certainly a contributor, I'd like to offer a few additional—somewhat provocative—observations.

First, the overwhelming majority of medical school admissions committees lack any significant diversity. Hence, critical admissions decisions and policies are set by a select few who fit a particular profile. I am not suggesting the explicit discrimination that was common during segregation and led to the birth of Historically Black Colleges and Universities, for example, but rather the more insidious process of stereotyping and subconscious bias. Research is emerging on stereotyping and clinical decisionmaking (Green et al., 2007) and documents stereotyping and racial profiling in general hiring (IOM, 2003)); certainly, it affects the admissions process as well. Individuals who believe they are making equitable admissions decisions may subconsciously stereotype certain students, leading to admissions patterns that perpetuate the underrepresentation of minorities in medical school. The AAMC has developed a web-based training on the topic of stereotyping for admissions and hiring personnel (Addams, 2010).

Second, privilege begets privilege. Students from families of physicians, who are more likely to be from the majority population, are more likely to be networked and receive "legacy" status at medical schools, thus facilitating the admissions process. Studied in *In the Nation's Compelling Interest* (2004), this pathway is well documented in undergraduate education, once again begging the question of why medical schools should be any different. The result is an admissions cycle that promotes the status quo and, given the limited number of positions available each year, limits efforts to achieve diversity in the health professions.

Third, all the truths about medical school admissions that we hold to be self-evident may not be evidence-based at all. Many question the predictive value of the MCAT; while it may predict success in the first two years of medical school; it does not necessarily predict the development of well-qualified physicians (IOM, 2004). Increasing patient dissatisfaction with healthcare and bedside manner calls these admission standards into question. Are we certain we are using the right admission tools and criteria to meet patient needs? How have current policies affected efforts to achieve diversity? Should they not be revisited? In fact, the MCAT will soon add components to measure an applicant's knowledge of the social sciences and humanities—a significant departure from its strictly science past and probably intended to address the need for more well-rounded, humane, communicative physicians (Schwartzstein, Rosenfeld, Hilborn, Oyewole, & Mitchell, 2013). How it will affect diversity is yet to be seen, but many feel it will be positive.

PROMISING PRACTICES

Many programs aim to increase interest in medical careers. Some are cross-sectional or longitudinal; some begin early, while others target high school or college students. Most are geared to direct well-qualified, underrepresented minority students into the "educational pipeline". For example, sponsored by the Robert Wood Johnson Foundation, the AAMC developed the Summer Medical and Dental Education Program (SMDEP). Founded in 1988 as the Minority Medical Education Program (MMEP), it brings freshman and sophomore prehealth students from minority, rural, and disadvantaged backgrounds to twelve medical and dental schools for six weeks to expose them to health careers.

Similarly, in collaboration with Boston Public Schools, Harvard Medical School (HMS), has created a high school science curriculum, MEDscience, that connects classroom lessons in human biology with weekly activities at a simulation center and a hospital. High-stakes problem solving in the dynamic world of simulated medical emergencies aims to foster critical thinking and teamwork and inspire students to achieve and to seek further education in health and science careers. The educational objective is to create future scientists; specifically, to increase urban, underrepresented students' interest, achievement, and career planning in science professions. The program is taught at several Boston high schools.

Massachusetts General Hospital's (MGH) Multicultural Affairs Office (MAO), whose mission is to facilitate and to promote the advancement of minority students, physicians, and researchers, has also developed several initiatives to promote diversity. The MAO Summer Research Trainee Program (SRTP), established in 1993, selects ten to fifteen minority college and medical students for an eight-week research experience at MGH. The students receive MGH-affiliated housing and a financial stipend and are paired with MGH research preceptors according to their interests. Research training is supplemented with educational workshops and social events. SRTP, which is fully funded by MGH, has been extremely successful. Over 98% of undergraduates who have completed it have matriculated into medical or graduate school, and many plan careers in academic medicine. MGH has benefited from SRTP as well; several alumni have returned for clinical training.

MAO also collaborates with the 21 MGH residency programs to recruit minorities. MAO staff meets with minority applicants to highlight the unique training opportunities at MGH. MAO-sponsored receptions allow minority applicants to mingle with minority residents and faculty and experience the richness and collegiality of the community. MAO also facilitates revisit opportunities for top minority applicants and conducts post-match surveys of minority applicants who could have come to MGH but chose to train elsewhere. Results are shared with the clinical departments and often influence departmental and MAO recruitment initiatives.

On the national front, the Tour for Diversity in Medicine (T4D, www.tour4diversity.org) brings physicians, dentists, medical and dental students, and prehealth advisors to undergraduate institutions to inspire and mentor students over the course of a day-long conference. Each Educational Stop, chosen based on multiple factors, consists of large audience presentations, small group discussions, and interactive workshops addressing long-range planning and processes toward medical school and providing the opportunity to gain advice and guidance from current practitioners and medical students. Local physicians, dentists, and medical students are invited to widen mentorship and enhance future networking. In addition to the planned sessions, T4D staff meets with campus leaders, prehealth advisors, and administrators to discuss advising and other ways that T4D might assist the university's premedical enrichment efforts. To date, the T4D has traveled over 4,000 miles, reaching over 1,400 students.

Where do we go from here?

To diversify the healthcare professions, several conditions must be met:
- sustained leadership—at all levels of medicine—that makes an evidence-based case for diversity;
- measures of accountability—and objective justification—for admissions processes;

911

- awareness-raising about stereotyping's effect on medical admissions and required training to address it among those engaged in the admissions process;
- review of the tools, include the MCAT, and criteria for admissions, including "distance travelled", to assure trainees are prepared to meet the needs of an increasingly diverse population;
- expansion of the educational pipeline for minorities qualified to enter the health professions; and
- activism among minority students and faculty around the topic of diversity.

Ultimately, the underrepresentation of minorities in the healthcare workforce and leadership has broad implications for eliminating racial/ethnic disparities in health and healthcare that warrant steady attention. Successful programs are not in short supply, but the leadership, policies, procedures, accountability, and training to support them are. Having a healthcare workforce that reflects our nation's increasingly diverse population is vital if we are to realize the goals of healthcare and payment reform and deliver high-quality care to all. Improving quality and achieving equity demand it, and the future is now.

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913

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917