

# To Succeed in Value-Based Care, Eliminate Race and Gender Disparities

By Professor Ian Meredith, Executive Vice President and Global Chief Medical Officer, Boston Scientific

Value-based care is a reality and growing in importance, with hospitals leading the movement from fee-for-service models to patient-centric, evidence-based, risk-based reimbursement emphasizing quality driven patient outcomes and lower costs.<sup>1</sup> For clinicians and hospitals to succeed in this transition, more in-depth data on the relative impact of socio-economic and demographic factors is needed to understand the broader determinants of patient health care outcomes. A University of Wisconsin Population Health Institute and Robert Wood Johnson Foundation study found that only 20 percent of factors influencing a patient's health are related to "clinical factors" such as access and quality of health care. Social determinants of health including socio-economic status, demographic and behavioral attitudes, which can be hard to address during clinical visits, make up the other 80 percent.<sup>2</sup>

Structural and socio-economic barriers disproportionately affect the health of women and minorities, who tend to present to hospitals later in the course of their illness and with more co-morbidities, which may result in poorer health outcomes and potentially higher costs to the institution. Hospitals and clinicians must take these factors into account as they map the wider patient needs, appropriate resources and staffing, form strategic partnerships, contract with payors and even when allocating resources for potential mergers and acquisitions. The challenge is: how can we deliver equitable, accessible, evidence-based quality health care in an environment impacted by racial, gender and socio-economic disparities?

## *Understanding the data gap*

Providing evidence-based, and therefore value-added care, begins with understanding the data gap. Women and minorities have traditionally been underrepresented in large clinical trials for decades. Heart disease, the leading cause of death in the U.S., is a prime example.<sup>3</sup> Women make up 51 percent of the U.S. population and compared to men, carry a higher burden for many diseases, including cardiovascular diseases.<sup>4</sup> Between 2000 and 2007, the number of women enrolled in U.S. cardiovascular disease device clinical trials was only one-third of the total study population.<sup>4</sup> African-Americans, who compose 12 percent of the U.S. population and have a disproportionately high rate of cardiovascular disease comprise just five percent of participants in cardiology clinical trials.<sup>5</sup> Similarly, persons of Hispanic heritage, who comprise over 16 percent of the U.S. population, account for only one percent of eligible participants in cardiology studies.<sup>6,7</sup> Compounding this, other studies show women and people of color actually receive fewer necessary treatments for heart disease than white males even though heart disease is similarly prevalent in men and women and across ethnic groups.<sup>7</sup>

## *Leveling the playing field*

Access to data specific to women and people of color may provide telling insights for the health care community and help physicians make more informed treatment plans that take in to account the patient's cultural, demographic and socio-economic status.

<sup>1</sup> Value-Based Readiness: Setting the Right Pace, Health Leaders Media, May 2017, [http://www.pages02.net/blrhealthcaredivision/Value\\_Based\\_Readiness?webSyncID=e2161d8d-2035-6743-d7c0-ec179c22dc36&sessionGUID=1a580dbe-d8b5-6e20-c581-93285d409961](http://www.pages02.net/blrhealthcaredivision/Value_Based_Readiness?webSyncID=e2161d8d-2035-6743-d7c0-ec179c22dc36&sessionGUID=1a580dbe-d8b5-6e20-c581-93285d409961)

<sup>2</sup> Hood, Carlyn et al. "County Health Rankings: Relationships Between Determinant Factors and Health Outcomes." *American Journal of Preventative Medicine*. 50.2 (2016): 129-35. PMC. Web. 31 Oct. 2016 <https://www.ncbi.nlm.nih.gov/pubmed/26526164>

<sup>3</sup> Benjamin, Emelia et al. "Heart Disease and Stroke Statistics – 2017 Update." *American Heart Association* 135 (2017). 25 Jan. 2017. <http://circ.ahajournals.org/content/135/10/e146>

<sup>4</sup> Coakley, Meghan et al. "Dialogues on Diversifying Clinical Trials: Successful Strategies for Engaging Women and Minorities in Clinical Trials." *Journal of Women's Health* 21.7 (2012): 713–716. PMC. Web. 14 Oct. 2016: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3432572/>

<sup>5</sup> Graham, Garth. "Population-based approaches to understanding disparities in cardiovascular disease risk in the United States." *International Journal of General Medicine* 7(2014): 393-400. PMC. Web. 7 Aug 2014. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4132228/>

<sup>6</sup> U.S. Census Bureau (2000). Population by Race and Hispanic or Latino Origin for the United States, Regions, Divisions, States, Puerto Rico, and Places of 100,000 or More Population (PHC-T-6). <https://www.census.gov/population/www/cen2000/briefs/phc-t6/index.html>

<sup>7</sup> Clinical Trials Shed Light on Minority Health. *CardioSmart: American College of Cardiology*, 26 Apr. 2013 <https://www.cardiosmart.org/News-and-Events/2013/04/Clinical-Trials-Shed-Light-on-Minority-Health>



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To produce an increased flow of data critical for hospitals and physicians in the cardiology arena, Boston Scientific initiated a first-of-its-kind study called PLATINUM Diversity. The clinical trial exclusively recruited women, African-Americans, Latino Americans and Native Americans with coronary artery disease to examine how gender, race and economic status can affect medical outcomes after common cardiovascular interventions, such as stent implantations.

Trial analyses showed women and minorities are more likely than white men to experience recurrent cardiovascular events in the year after a stent implantation, and that minority women have nearly four times higher risk of a heart attack than white men one year after stent implantation. Individuals with the lowest annual household incomes are at significantly higher risk of repeat hospitalizations for target vessel revascularization (repeat procedures to unblock the artery) and heart attacks, and at greater risk of death than those with higher incomes.

PLATINUM Diversity is part of Boston Scientific’s multifaceted Close the Gap initiative, which aims to promote health equity for all patients. Close the Gap teams share data with hospitals to increase awareness of cardiovascular disease prevalence and treatment disparities among women and minorities in their respective communities. The data also help hospitals identify objectives, action plans and metrics to track progress on closing health care gaps for high-risk patients.

At the community level, Close the Gap works with hospitals, primary care physicians, patient advocacy groups and minority health organizations to educate patients through health fairs and screening events tailored to the demographic make-up of their communities. The initiative facilitates dialogues between health care providers and community members to discuss cardiovascular disparities in their area and strategies to overcome barriers to optimal care.

#### **Best practices to close the gap**

First, to eliminate disparities in care, hospitals benefit from understanding the baseline demographics of patients receiving therapies. In the case of Close the Gap, we focus on advanced therapies such as coronary revascularization and defibrillator implantation. This information can be evaluated in the context of a hospital’s treatment demographic to help target highest-risk and often underserved populations.

Second, hospitals should actively engage providers along with local community leaders, national and local patient advocacy groups and professional minority organizations to deliver culturally and socially relevant messages to both the public and physicians through the right channels. Often, a hospital’s established care network does not extend into the communities at highest risk and greatest need making it crucial for practitioners already providing care to these groups to be actively involved.

Third, to ensure interventions are effective, hospitals must collect data to measure and quantify impact and to inform program adjustments as needed.

#### **Fewer disparities can lead to successful value-based care**

Eliminating cultural, race, gender and socio-economic disparities in health care is fair, appropriate for patients, good for industry and right for society at large. In the world of value-based care where hospitals are increasingly responsible for reducing costs while improving outcomes of the populations they serve, it makes good business sense as well.

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