



Research Insights

■ Solutions to Health Care Disparities: Moving Beyond Documentation of Differences

Summary

In the context of health care, the term “disparities” refers to significant differences between one population and another in terms of the rate of disease incidence, prevalence, morbidity, mortality, or survival rates.¹ Disparities in health care are differences in the quality of care patients receive based on their race and ethnicity, even when they have health insurance. The research community has thoroughly documented the existence of racial and ethnic disparities in health and health care in the United States. Experts in the field are now concerned with moving from documentation of differences toward efforts to actually eliminate disparities in health care.

Three recent examples illustrate potential strategies for reducing disparities. These interventions targeted specific disparities in three areas—premature birth, diabetes care, and physician service quality. Analysis of these interventions suggests that they all share certain elements in common. They contained multiple components to target different points in the health care system, they were culturally appropriate, and they made extensive use of data from health information technology (HIT) to identify characteristics of individuals affected by disparities and to allow successful interventions to be replicable. Moving forward with disparities reduction and addressing barriers on a national level will require engagement from the research community and leaders of health care systems.

Introduction

In its 2002 report *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, the Institute of Medicine (IOM) defined health care disparities as the difference in quality between racial or ethnic groups that is not justified by differences in access, health status, or the preferences of the groups.² There are many populations affected by health disparities including racial and ethnic minorities, rural residents, women, children, persons with disabilities, and the elderly. Health disparities can also be rooted in other factors linked to discrimination, such as sexual orientation and gender identity.³ The literature suggests that there are multiple patient, provider, and system-level factors that contribute to health care disparities.⁴

Racial and ethnic disparities in insurance coverage, access to services, and quality of care received are some of the factors that contribute to unequal health outcomes in the United States.⁵ There are several core measures of health and access in which minority populations fare worse than whites. For example, African American children have a rate of hospitalization for asthma that is four to five times higher than the rate for white children, and approximately one-third of nonelderly Latinos are uninsured, while the uninsured rate is only 13 percent for whites. These racial and ethnic disparities are well-documented and persist even when comparing groups of similar socioeconomic status (SES).⁶

Genesis of this Brief: AcademyHealth’s Annual Research Meeting 2011

AcademyHealth convened a panel of experts to share their experiences and perspectives on health care disparities during its Annual Research Meeting (ARM) in Seattle, Washington, in June 2011. Sheila Owens-Collins, M.D., M.P.H., M.B.A., vice president and senior medical director of Community First Health Plan in San Antonio, Texas; David Newhouse, M.D., M.P.H., assistant physician-in-chief, Kaiser Permanente, Fremont, California; Thomas Sequist, M.D., M.P.H., associate professor of medicine and health care policy, Brigham and Women’s Hospital and Harvard Medical School and director of research, Atrius Health; and Joseph Betancourt, M.D., director, Disparities Solutions Center at Massachusetts General Hospital, participated in the panel. Joel Weissman, Ph.D., associate professor of health policy at Harvard Medical School, moderated the discussion.

While traditional health services research has been successful in identifying and documenting health care disparities, some observers suggest that it is time to progress from documentation toward efforts to actually reduce disparities.⁷ Moving from documentation to intervention involves using data from health information technology (HIT) to develop and test targeted interventions for populations affected by disparities.

Moving from Documentation to Intervention

Reducing disparities in health care is currently a national policy priority. The Patient Protection and Affordable Care Act (Affordable Care Act or ACA) has several features that may aid in disparities reduction. These include expanded insurance coverage, additional funds for Community Health Centers, and an expansion of the National Health Service Corps, which funds and places health care professionals in underserved areas. In April 2011 the Department of Health & Human Services (HHS) released the *HHS Action Plan to Reduce Racial and Ethnic Disparities*.⁸ This document builds upon the Affordable Care Act and identifies priority areas for HHS. These include promoting increased data collection, incentivizing better health care quality for minority populations, and realigning HHS priorities so that all divisions are addressing health disparities. Additionally, every 10 years HHS releases Healthy People objectives. These are evidence-based national goals for improving Americans' health. The December 2010 launch of Healthy People 2020 included a special focus on disparities and social determinants of health. During the next decade, Healthy People 2020 will collect data on chronic conditions, illness and death rates, and other health outcomes by different factors including race, ethnicity, gender, and geographic location.⁹

There has also been action from major stakeholders in the health care industry. In July 2011, provider associations including the American Hospital Association, the National Association of Public Hospitals, the Catholic Health Association, the American College of Healthcare Executives, and the Association of American Medical Colleges (AAMC) issued a “national call for action” to address disparities in the delivery of care.¹⁰ This effort focuses on increasing the collection and use of race and ethnicity data, greater cultural competency training for medical staff, and increasing diversity in health care industry governance and leadership.¹¹ In launching this effort, the stakeholders acknowledge both the ethical imperative to end disparities and the strategic business case—the long-term financial viability of hospitals will depend on their ability to care for an increasingly diverse patient population.¹² In addition, the AAMC is working with the next generation of physicians on disparities reduction. Its 2009 document, *Addressing Racial Disparities in Health Care: A Targeted Action Plan for Academic Medical Centers*, outlines recommendations to increase medical trainees' exposure to underserved settings and to heighten awareness regarding segregation of care and disparities.¹³

Engagement by the federal government and the health care industry on disparities will help to build infrastructure and provide a broad base for work on the issue. However, designing an intervention to address a specific disparity requires identification of a target group and specific, measurable outcomes.¹⁴ Targeted interventions may focus on patients with a particular characteristic or condition, communities served by the health care system, or the attitudes, skills, and behaviors of providers.¹⁵ Examples of these interventions include case management, provider education, the use of community health workers to reach specific populations, and system redesign. Interventions can also target different levels of the health care system such as the patient, provider, hospital, or health system.¹⁶

Case Studies in Targeted Interventions

A session at AcademyHealth's 2011 Annual Research Meeting titled “Solutions to Health Care Disparities: Moving Beyond Documentation of Differences” highlighted the efforts of three organizations to address health care disparities. There are several elements that these interventions have in common:

- **Multiple Components:** Rather than a single mechanism for intervention (e.g. case management), these interventions used several methods (e.g. case management and provider education) to reach multiple targets, including the patient, provider, and health care organization.
- **Cultural appropriateness:** While there is a lack of studies comparing culturally tailored interventions with more generic quality improvement initiatives, there are practical reasons to believe that culturally tailoring disparities reduction efforts enhances their effectiveness.¹⁷ Each of the interventions highlighted below attempted to take into account the particular cultural needs of the target population to fully address the disparity and to encourage patient and provider engagement in the intervention.
- **Use of HIT:** Using data from HIT, the architects of these interventions were able to identify the characteristics of affected patients or providers. This data allows successful interventions to be replicable. With knowledge of the characteristics that may predispose patients to poorer health outcomes or access, individuals can be targeted for early outreach in disparities reduction efforts.

Reducing Premature Births: Community First Health Plans

Each year, more than a half a million babies in the United States are born prematurely. While the reasons for preterm birth are not completely clear, research has shown that it occurs more often among certain racial and ethnic minorities, particularly African Americans.¹⁸ Prematurity can incur significant costs for the health care system. Average expenditures for premature or low birth rate infants are more than 10 times those for uncomplicated births.¹⁹

Community First Health Plans is a non-profit managed care organization with 170,000 covered lives in CHIP, Medicaid, and the commercial insurance market. In San Antonio, Texas, Community First developed a program to identify women at risk for premature delivery. This initiative, Healthy Expectations, uses predictive modeling to identify risk factors for premature delivery and conducts targeted outreach to women that match these characteristics. By reaching out to at-risk women and allocating resources for early intervention, Community First is aiming to reduce health care costs and improve the health of infants and mothers.

Community First began by evaluating its tools (surveys and health risk assessments) to see if they could be updated to capture more information on the lifestyle and behavior patterns of at-risk women. The intervention's designers consulted with mothers and providers with experience in high-risk pregnancy to determine the racial, ethnic, and cultural disparities that predispose women to premature birth. With this knowledge, they created a tool to more accurately identify at-risk women. The goal was to use the model to increase the early referral and identification of high-risk pregnancies.

The program design has several components. First, there is outreach to all pregnant women and a survey is administered to assess risk status. The survey addresses medical risk factors for prematurity such as HIV infection, short time between pregnancies, bleeding, and maternal age. The survey also covers non-medical factors such as emotional state, support system, and lifestyle. Each patient's obstetrician also completes a risk assessment survey.

The second component of the program addresses early identification and referral. The health plan identified pregnant women through three main sources—a state file, notification by a patient or provider, or receipt of a claim related to pregnancy. Since these methods failed to capture all the women in the health plan in the early stages of pregnancy, it was necessary to develop new identification strategies. Working with hospitals and providers, the program designers developed new methods for increased surveillance such as tracking emergency department visits, pharmacy data, ultrasound requests, and hospitalizations unrelated to delivery. Through this process, the program increased early referrals by 36 percent.

Using the survey results, the women are stratified into high and low-risk groups. Both groups receive educational materials on topics like nutrition, breastfeeding, and well child care. The low-risk women are tracked for any change in health status. In addition to the educational material and tracking, the high-risk women receive intensive one-on-one nurse case management until the sixth postpartum week.

The first year's results included improvements on key health measures. While there was an increase in the total number of pregnancies between 2009 and 2010, there was a 10.8 percent decrease in the number of complex newborns (a baby staying in the hospital for more than five days after delivery) and the prematurity rate decreased by 3.2 percent. Program observers noted several key points from the program's first year:

- Multiple factors contribute to a predisposition for premature birth.
- Population risk stratification is appropriate in order to most effectively allocate program resources.
- Risk stratification is improved by enhancing data collection in health risk assessment tools and by increasing surveillance for at-risk pregnancies.

The designers of Healthy Expectations are targeting several program areas for improvement. For example, currently there are a large number of medical risk factors used to identify high-risk pregnancies, and they will conduct analyses to narrow the variables and make the risk assessment tool more effective.

Physician Service Scores: Kaiser Permanente

Health care disparities are evident not only in clinical outcomes, but also in service quality. Research shows that minorities, as compared to whites, experience poor service quality in the form of long appointment lags, waiting times, and lower patient satisfaction.²⁰ The result of this disparity is not just patient inconvenience—low service quality may hinder the ability to achieve technical quality and positive clinical outcomes.²¹ In order to reduce service disparities, it is necessary to have robust and comparable measures of the patient experience.²²

Kaiser Permanente of Northern California uses Member Patient Satisfaction Surveys (MPS) to measure patient satisfaction among enrollees. These scores are used to partially determine physician pay raises and bonuses at some facilities. The MPS report uses an overall number for the physician score and physicians receive a basic breakdown along the lines of age, gender, and patient familiarity (new vs. returning), but do not receive more detailed data on race and ethnicity.

In the Northern California region, physicians were often penalized on their scores due to the increasing diversity of the patient population. If a physician performed poorly with a particular group of patients, the overall MPS score decreased. With a diverse patient population, it is difficult to determine exactly which group needs improvement. Poor performance with a particular group of patients could represent conscious or unconscious biases on the part of the physician or the patient, potentially exacerbating health disparities.

In order to increase both patient satisfaction and physician professional satisfaction, Kaiser Permanente of Fremont, Calif., undertook a pilot program to revise the MPS database to capture more patient race and ethnicity data. The goal of the Diversity, Demographics, and Analytics Program was to provide physicians with refined scores to self-correct problems, focus on areas for improvement, and address any unconscious biases. The new MPS captures detailed data on race and ethnicity along with the previous measures of gender, age, and patient familiarity. Through the use of trend and average data along with score color-coding, the new format allows physicians to address patterns in their service scores. The revised format also enables the recognition of potential unconscious bias in the physician and/or the patient. Through the combination of the race and ethnicity data with the familiarity measure (new vs. returning), physicians can see patterns in their populations. For example, if a physician consistently receives low scores from new patients of a particular racial or ethnic group, it could represent bias on the part of the patients and/or the provider.

Giving physicians more detailed data also allows them to address the “not me” phenomenon. This refers to physicians acknowledging the existence of disparities in the health care system, but believing that they, as individuals, do not contribute to the problem. This mindset is problematic for disparities reduction efforts because it is difficult to engage physicians who do not believe that care needs to be changed. However, when physicians receive their own personal data, it is easier to illustrate systemic problems and begin to work toward improved service for patients.

After an initial pilot with a small number of physicians and focus groups, the program expanded to 6,000 physicians in Northern California Kaiser Permanente. The program designers have identified service score gaps between white patients and other racial ethnic minorities. Using the new, detailed data, physicians are able to work on correcting this service disparity. The program has been successful, and the level of detail of the MPS can be enhanced in the future to capture scores from other groups of interest. Program architects note several key lessons moving forward:

- Using one service score that does not adequately capture patient diversity has unintended consequences.
- Breaking down service scores is an effective approach for improvement at the individual physician, department, and facility level.
- Identification of unconscious bias on the part of the patient and/or provider is possible through race and familiarity data.

Racial Disparities in Diabetes Care: Harvard Vanguard Medical Associates

Racial and ethnic minorities with diabetes experience disparities in both outcomes and quality of care.²³ Harvard Vanguard Medical Associates (HVMA)—a non-profit, multi-specialty physician group serving approximately 300,000 adult patients in eastern Massachusetts—sought to reduce disparities for its approximately 15,000 diabetic patients. In the late 1990s it began a program to redesign diabetes care. There were three components—improved clinical information systems (including an electronic medical record with decision support capability), population registries to track patients in between office visits, and the use of care teams to increase patient engagement.

This initial effort was a generic, rather than a targeted, quality improvement program. All diabetic patients were included and there was no attention to race or ethnicity, gender, or SES. During the program, HVMA improved diabetes care in several ways. For example, process measures, including annual testing of hemoglobin A1C and cholesterol levels, saw improvement and there were no racial disparities. However, on outcomes measures (actual scores on hemoglobin A1C, cholesterol, and blood pressure) there were gaps between African American and white patients. In response to this disparity, HVMA undertook a provider training and education program to discover the roots of the outcomes disparity and to work toward closing the gap.

The intervention program had three main components:

- HVMA conducted a campaign to improve the collection of race and ethnicity data. Initially there was race data on only 40 percent of the population. After the campaign and prior to the intervention program, they increased the number to approximately 80 percent.
- HVMA increased provider awareness of racial disparities to counter the “not me” phenomenon. The program designers used provider-specific performance reports to illustrate that racial disparities are a local, not just a national, problem. The performance reports contained current provider-level data, monthly updates, and quarterly inclusion of race-stratified dashboards.
- The providers were given tools to aid in disparities reduction. These included off-site cultural competency training and monthly educational tips gathered from patient feedback, surveys, and focus groups. Providers also spent an afternoon in a neighborhood health center interacting with patients and discussing their barriers to care.

Thirty-one primary care teams, corresponding to approximately 7,500 diabetic patients, were randomized into intervention and control groups. There were positive results with regard to awareness of racial disparities. The teams that went through training were more likely to recognize disparities as an issue in their own practices. However, the intervention group, while recognizing disparities as an issue, was more likely to feel that the components of the intervention (cultural competency training and performance feedback) did not help them address disparities. Finally, the outcomes measures were almost identical between the intervention and control groups and the intervention did not close the gap in clinical outcomes between white and African American patients.

Following the intervention, the program designers interviewed physicians to gather feedback. They found that many providers felt overwhelmed by the issue of racial disparities. While some appreciated the feedback reports and education, others felt that disparities were still largely out of their control. Providers often felt that patients were experiencing such large challenges that there was little that the health system or an individual provider could do to improve their circumstances.

These mixed results highlight some of the challenges of addressing racial disparities in health care. While the cultural competency training and performance feedback helped providers recognize that disparities are an issue, it also may have left them feeling frustrated that they did not change clinical outcomes. Additionally, this program lasted for only 12 months, and it may be that some disparities are so entrenched that it requires much more time to change practices and improve care delivery.²⁴

Moving Forward: Next Steps in Disparities Reduction

Each of these cases highlights innovative ways to move beyond documenting health care disparities toward eliminating them. Looking past these interventions, the evidence to-date suggests that there are still barriers around addressing disparities at a national level. The major issues lie in structural barriers unrelated to health care that impact disparities. Social determinants of health, such as education and income, impact access to the resources necessary for health, such as nutritious food and safe housing.²⁵ While gaps have narrowed in areas such as income and education, health disparities have been more resistant to change. For example, between 1960 and 2000, African American median income rose from 65 to 84 percent of that of whites. On the other hand, there were no marked improvements in mortality disparities during the same time period.²⁶

While these structural barriers are challenging to reduce, there are disparities in health care delivery that the health system can work to correct.²⁷ A major challenge in these efforts is engaging leaders of

hospitals and health systems. With many other issues competing for leaders' attention, it is often challenging for health care disparities to emerge as a defining issue.²⁸ National organizations such as the Joint Commission and the National Quality Forum are framing disparities reduction as central to quality improvement efforts. Experts who have examined these programs note that routine collection of data, particularly data on race and ethnicity, will allow systems to identify disparities in care as a routine matter and use the data to develop and implement solutions. There is also a need to evaluate the interventions already in place to ensure that they are achieving desired outcomes. Subjecting the interventions to cost-benefit analysis will allow systems to see if they are allocating resources in the most effective way to reduce disparities.²⁹

The execution and evaluation of these interventions represents a departure from research on health disparities. Moving beyond identification and descriptive activities will mean transforming the way that those in health care delivery analyze what works in disparities reduction. Interventions to reduce disparities should target those populations most at-risk, be culturally competent, and disseminate findings in order to replicate successful projects.³⁰ Research will need to take account of these activities and invest in dissemination of successful interventions.

About the Author

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Endnotes

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