

# Federal Investments to Eliminate Racial/Ethnic Health-Care Disparities

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## ABSTRACT

Health care is an important lever for moderating the effects of social determinants on health. We present a model that describes the relationships among social disadvantage, health-care disparities, and health disparities. Improving access to health care and enhancing patient-provider interaction are critical pathways for reducing disparities. Increasing the diversity of the public health and health-care workforces is an efficient strategy for reducing disparities because it impacts both access to care and patient-provider communication. Federal policy makers should continue interest in workforce diversity to optimize the health of all Americans.

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Health disparities are a serious problem for our nation. Health should be achievable by the vast majority of Americans rather than distributed based on one’s race/ethnicity, and socioeconomic status. The annual costs of health disparities are measured in hundreds of billions of dollars.<sup>1</sup> Ensuring that all Americans, including those born into social and economic disadvantage, lead healthy lives is a priority of the U.S. Department of Health and Human Services (HHS).

To combat health disparities and move the nation toward health equity, the National Partnership for Action to End Health Disparities was established, with the goal of developing a nationwide, comprehensive plan. The Partnership developed the National Stakeholder Strategy for Achieving Health Equity (hereafter, Stakeholder Strategy), which calls for increasing awareness of health disparities, strengthening leadership to address disparities, improving health outcomes for underserved populations, improving cultural and linguistic competency and diversity of the health-care workforce, and improving data and research on disparities.<sup>2</sup> The HHS Action Plan to Reduce Racial and Ethnic Health Disparities (hereafter, HHS Disparities Action Plan) complements the Stakeholder Strategy and identifies goals, strategies, and actions (Figure 1) for HHS to undertake to achieve “a nation free of disparities in health and health care.”<sup>3</sup> These goals provide the framework for federal investments in initiatives to eliminate health disparities.

Health derives from a variety of factors, including genes and biology, health behaviors, the social environment, the physical environment, and health care.<sup>4</sup> The estimated influence of health care on the health of a population is relatively modest, accounting for only one-fifth relative to the other determinants. However, health care can interact with other determinants to improve population health. For example, preventive care can support healthy lifestyles and attenuate some of the risks of unhealthy genes, while health counseling can help patients avoid dangers in the physical and social environments. Reflecting these influences, two of the five goals of the HHS Disparities Action Plan depend upon the health-care system—transforming health care and strengthening the nation’s health-care workforce.<sup>3</sup>

This article focuses on federal efforts to reduce health disparities by improving health care. We present a model that examines the relationship among social determinants of health (SDH), health disparities, and health-care disparities. We discuss the unique role of workforce diversity in attenuating the effects of social disadvantage on health and health-care disparities.

### SDH AND HEALTH DISPARITIES

A conceptual framework illustrates how disparities in health care relate to SDH and disparities in health. SDH have a direct effect on health disparities and

**Figure 1. Goals and strategies of the HHS Action Plan to Reduce Racial and Ethnic Health Disparities<sup>a</sup>**

Goal	Strategies
Transform health care.	<ul style="list-style-type: none"> <li>• Reduce disparities in health insurance coverage and access to care.</li> <li>• Reduce disparities in access to primary care services and care coordination.</li> <li>• Reduce disparities in quality of health care.</li> </ul>
Strengthen the nation’s health and human services infrastructure and workforce.	<ul style="list-style-type: none"> <li>• Increase the ability of all health professions and the health-care system to identify and address racial/ethnic health disparities.</li> <li>• Promote the use of community health workers and <i>promotores de salud</i>.</li> <li>• Increase the diversity of the health-care and public health workforces.</li> </ul>
Advance the health, safety, and well-being of the American people.	<ul style="list-style-type: none"> <li>• Reduce disparities in population health by increasing the availability and effectiveness of community-based programs and policies.</li> <li>• Conduct and evaluate pilot tests of health disparity impact assessments of selected proposed national policies and programs.</li> </ul>
Advance scientific knowledge and innovation.	<ul style="list-style-type: none"> <li>• Increase the availability and quality of data collected and reported on racial/ethnic minority populations.</li> <li>• Conduct and support research to inform disparities reduction initiatives.</li> </ul>
Increase efficiency, transparency, and accountability of HHS programs.	<ul style="list-style-type: none"> <li>• Streamline grant administration for health disparities funding.</li> <li>• Monitor and evaluate implementation of the HHS Disparities Action Plan.</li> <li>• Conduct goal-level disparities monitoring and surveillance.</li> <li>• Evaluate programs at the strategy level.</li> <li>• Monitor programs at the action level.</li> </ul>

<sup>a</sup>Department of Health and Human Services (US). HHS action plan to reduce racial and ethnic health disparities: a nation free of disparities in health and health care. Washington: HHS; 2011.

HHS = U.S. Department of Health and Human Services

inequities (Figure 2, A). This relationship has been well described elsewhere.<sup>5</sup>

The availability of resources to support health at the family and community levels affects the length and quality of life. Families with limited financial resources cannot afford to purchase commodities needed to maintain health, such as healthy food and safe housing. When family members work long hours and multiple jobs to survive from paycheck to paycheck, time to exercise is scarce. Analogously, poor communities can only afford minimal investments in parks and playgrounds, clean water and sanitation, and police and fire departments that citizens need to be healthy. But it is not just about money. Families also need knowledge and discipline to adopt healthy lifestyles. Communities need social cohesion and trust to receive public health messages and to coordinate effective responses to public health threats. Inadequate knowledge, combined with inadequate financial resources, can generate distress in families and communities, which leads to stress-related illnesses such as high blood pressure, heart disease, anxiety, depression, and substance abuse.

In turn, health disparities have direct reciprocal effects on SDH. Families touched by premature death or chronic illness have less capacity to earn income and complete education. Moreover, communities with excess morbidity and mortality have diminished tax bases and human capital reserves. This connection

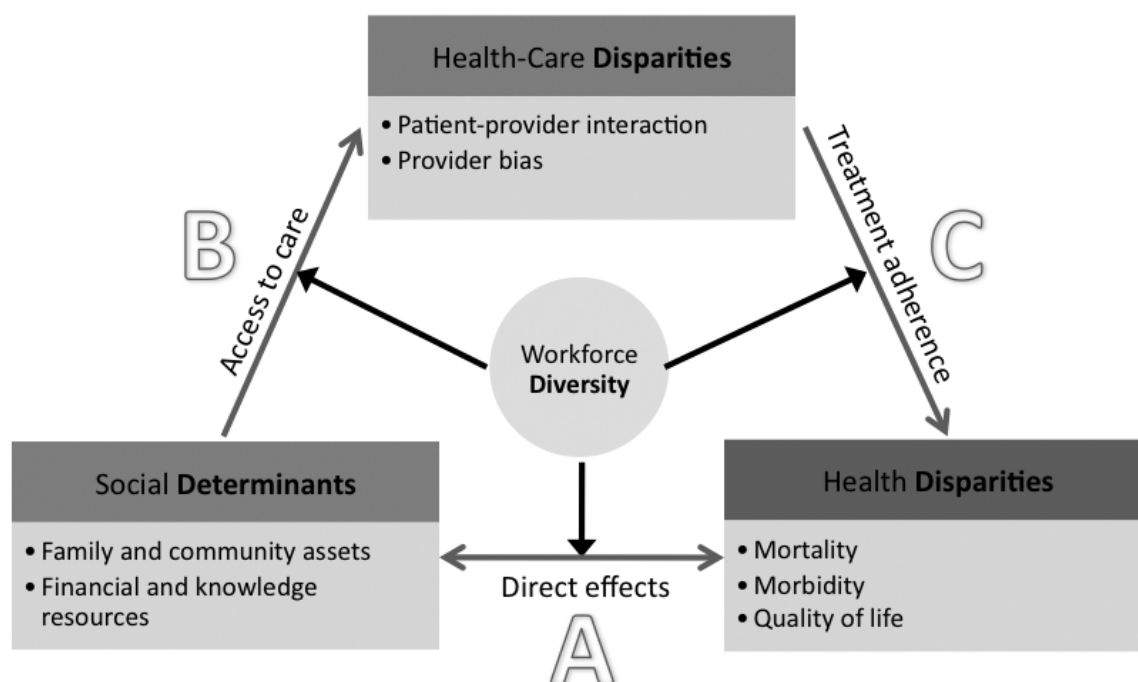
between SDH and health disparities creates a cycle that perpetuates the combination of poverty, low education, and poor health.

### SDH AND HEALTH-CARE DISPARITIES: ACCESS TO CARE

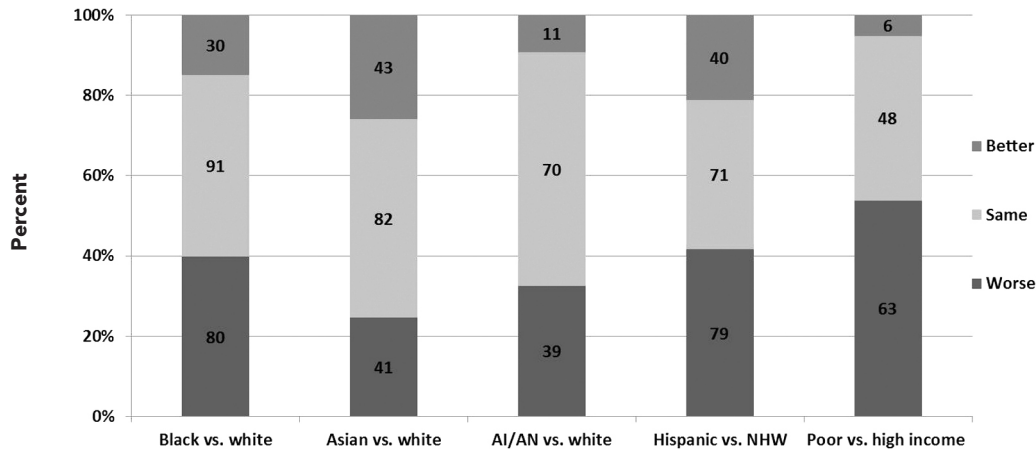
SDH have even stronger effects on disparities in health care (Figure 2, B). Access to health care is largely determined by family and community financial resources. Seemingly inexorable annual increases in health-care costs have made health insurance unaffordable for many Americans; poor families are the least likely to have health insurance coverage. When insured, even middle-income families have difficulty paying for deductibles, copayments, and uncovered services and medications. Likewise, poor communities, which often must use lower-quality health-care providers and facilities, have witnessed the closure of a disproportionate share of emergency departments. Again, knowledge resources are also critical. Understanding how to navigate complex health-care systems and how to coordinate services from multiple providers is challenging, especially for low-income and less educated patients whose health literacy is often limited. These patients must often rely on more knowledgeable family members and neighbors to receive necessary health care.

For 10 years, the Agency for Healthcare Research

**Figure 2. Model of how social determinants, health-care disparities, and health disparities interrelate**



**Figure 3. Number and proportion of measures of quality and access to health care tracked in the “2011 National Healthcare Disparities Report” for which members of selected groups experienced better, same, or worse quality of care compared with reference group<sup>a,b</sup>**



<sup>a</sup>Department of Health and Human Services (US), Agency for Healthcare Research and Quality. National healthcare disparities report, 2011. Rockville (MD): AHRQ; 2012.

<sup>b</sup>n = number of measures; better = population received better quality of care than reference group; same = population and reference group received about the same quality of care; worse = population received worse quality of care than reference group

AI/AN = American Indian/Alaska Native

NHW = non-Hispanic white

and Quality (AHRQ), through its work on the National Healthcare Quality and Disparities Reports, has tracked disparities in health care related to income, education, and insurance. We observe many disparities in measures of access to and quality of health care related to SDH. For example, while disparities related to race/ethnicity are common—affecting 25% to 42% of measures tracked in the reports—disparities related to income are even more prevalent, affecting more than half of the measures (Figure 3). Moreover, we observe little evidence that disparities related to SDH are getting smaller. Only about 10% of health-care disparities related to race/ethnicity or income have shown significant improvement in recent years (Figure 4).<sup>6</sup>

Because SDH have significant effects on health-care disparities by helping or hindering access to quality health care, reducing and removing barriers to care can effectively attenuate the impact of social determinants on health. The Patient Protection and Affordable Care Act of 2010<sup>7</sup> (hereafter, ACA) will greatly expand insurance coverage by encouraging employers to provide health insurance, giving credits to many uninsured families to help buy coverage through health insurance marketplaces, and expanding eligibility for Medicaid. Already, the ACA has reduced overall uninsured rates from 16.0% in 2010 to 15.1% in 2011 by allowing coverage, under their parents’ policies, of young adults aged 19–25 years, whose uninsured

rates fell from 33.9% to 27.9%.<sup>8</sup> The ACA also makes health care more affordable by reducing the cost of prescription drugs and making preventive services free to Medicare beneficiaries; limiting the overhead and profits of insurance companies; simplifying health insurance administration; and reducing waste, fraud, and abuse. We anticipate that, in the future, the annual National Healthcare Quality and Disparities Reports will document the ACA’s effects in improving access to care and reducing disparities related to SDH.

### HEALTH-CARE DISPARITIES AND HEALTH DISPARITIES: PATIENT-PROVIDER COMMUNICATION

Gaining entry into the health-care system via enhanced insurance coverage does not ensure that all patients will derive equal benefit from health-care services. Disparities in the quality of specific health-care services received can lead to disparities in health (Figure 2, C). Of problems related to health-care quality, disadvantaged populations may be most vulnerable to deficiencies in patient-provider communications. Even a simple misunderstanding between a patient and a health-care provider can hamper medical care. Low-income and less educated patients may be reluctant to participate in dialogue and medical decision-making, which may lead to treatment recommendations that

clash with patients' cultural beliefs or become difficult for patients to follow. Obviously, these communications can reduce efficacy and increase the risk of prescribed therapies. Unconscious bias may also lead providers to manage disease differently in patients with different backgrounds and lead unintentionally to suboptimal health outcomes.<sup>9</sup>

Fortunately, AHRQ and HHS have supported and performed extensive work to understand and improve patient-provider communication. While an AHRQ review of quality improvement interventions to address health disparities did not find sufficient evidence to conclude that such interventions are effective at reducing disparities, it did identify several promising approaches.<sup>10</sup> Patient-provider communication was at the center of all of these strategies, which included collaborative care, targeted patient education, and improved language concordance.

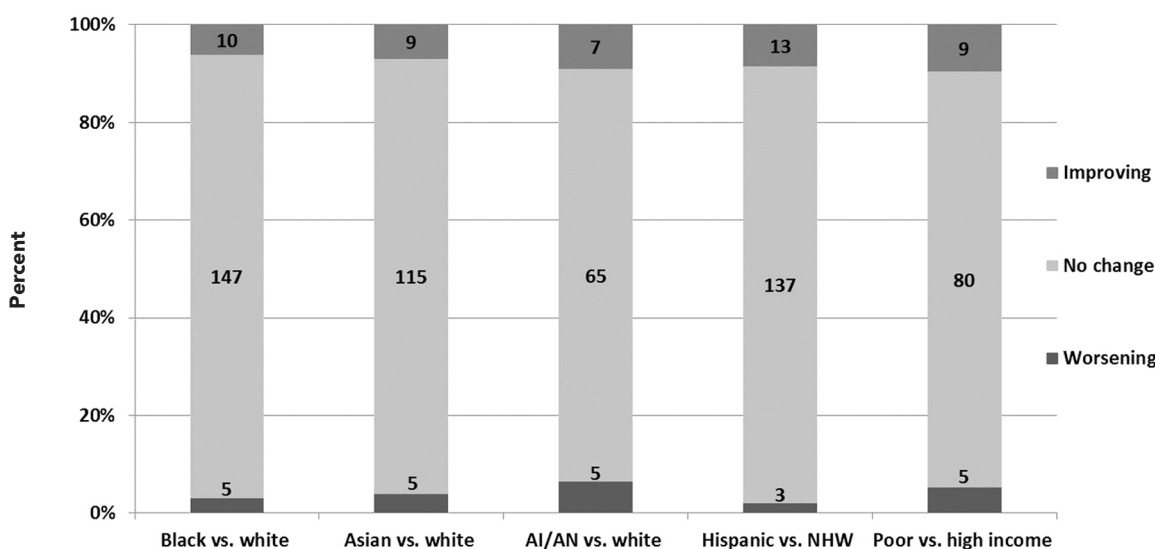
Health literacy provides another perspective on patient-provider communication. An AHRQ review of health literacy interventions and outcomes highlighted the problem of misunderstanding between patients and providers leading to nonadherence with treatment recommendations.<sup>11</sup> Among seniors, low health literacy was associated with a reduced ability to take medications appropriately, interpret labels, and understand health messages, as well as poorer health status and

higher mortality. Health literacy interventions successfully improved health-care use and outcomes, including lower disease prevalence and severity, fewer emergency room visits, fewer hospitalizations, and greater self-management behavior and cancer screening.

AHRQ has developed tools to allow providers to assess and track patient-provider communication. The Consumer Assessment of Healthcare Providers and Systems program surveys patients to measure their perceptions of care and to advance patient-centered care. Responses capture the quality of patient-provider communication and overall ratings of care administered in a variety of clinical settings, including health plans, hospitals, dialysis centers, providers' offices, and home health settings. Specific modules focus on issues related to cultural competency and health literacy. AHRQ has also supported the development of tools to quantify health literacy, such as the Rapid Estimate of Adult Literacy in Medicine—Short Form and the Short Assessment of Health Literacy for Spanish Adults.<sup>12</sup>

To improve patient-provider understanding, HHS developed the National Standards for Culturally and Linguistically Appropriate Services in health care (hereafter, CLAS Standards). The CLAS Standards outline language access services that must be provided by recipients of federal funds. Further, the CLAS Standards make recommendations for culturally competent

**Figure 4. Number and proportion of measures of quality and access to health care tracked in the “2011 National Healthcare Disparities Report” for which disparities are improving, not changing, or worsening<sup>a,b</sup>**



<sup>a</sup>Department of Health and Human Services (US), Agency for Healthcare Research and Quality. National healthcare disparities report, 2011. Rockville (MD): AHRQ; 2012.

<sup>b</sup>n = number of measures; improving = disparity is getting smaller at a rate greater than 1% per year; no change = disparity is not changing or is changing at a rate less than 1% per year; worsening = disparity is getting larger at a rate greater than 1% per year

AI/AN = American Indian/Alaska Native

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care and organizational supports for cultural competence.<sup>13</sup> To help managed care plans understand and meet these standards, AHRQ supported the development of two guides: Providing Oral Linguistic Services<sup>14</sup> and Planning Culturally and Linguistically Appropriate Services.<sup>15</sup> AHRQ has also supported work to identify cutting-edge state initiatives that improve access to language services in health care.<sup>16</sup>

To improve patient-provider understanding by accommodating patients with limited health literacy, AHRQ has supported the development of several tools. The Health Literacy Universal Precautions Toolkit provides step-by-step guidance and tools for primary care practices to assess and improve communication with patients of all levels of health literacy.<sup>17</sup> Because providers cannot always identify patients with limited health literacy, this toolkit helps practices build systems that promote better understanding for all patients, not just those believed to need extra assistance. The Pharmacy Health Literacy Center<sup>18</sup> is a repository of tools to help pharmacies ensure that patients adequately understand their medications. It includes assessment tools, training programs for pharmacy staff, and guides for creating “pill cards” to help patients keep track of medications and for developing automated telephone systems to remind patients to refill medications on time. AHRQ has also supported the development of a guide

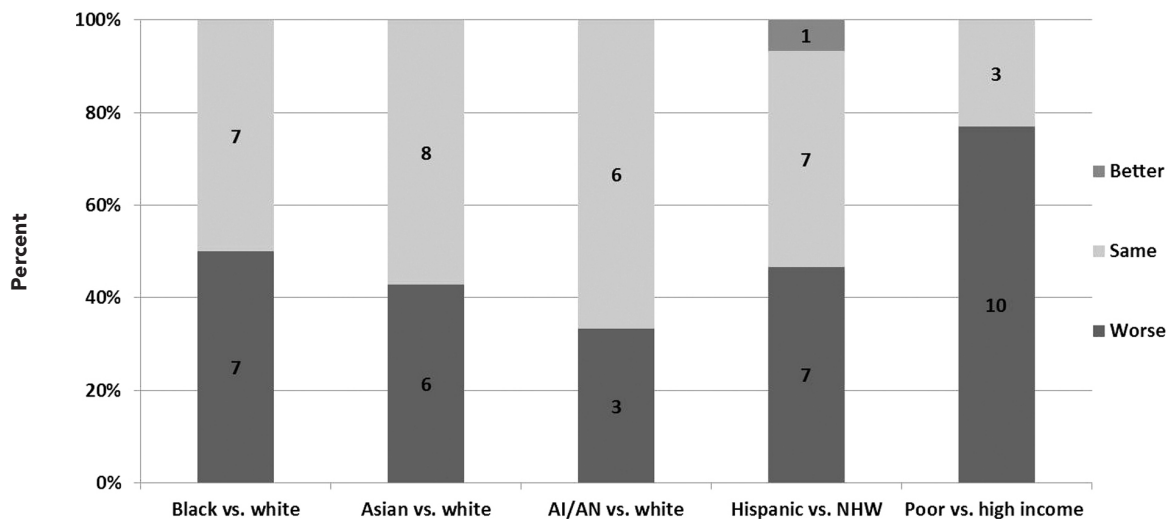
for developers and purchasers of health information technology to ensure such technology can be used by patients with limited literacy.<sup>19</sup>

Despite these efforts, problems with patient-provider communication persist. The “2011 National Healthcare Disparities Report” found that about 10% of adults report poor communication with their providers, and about 15% report that their usual provider sometimes or never solicited their involvement in making treatment decisions.<sup>6</sup> Not surprisingly, disadvantaged populations are most affected. Among measures of patient-centeredness—including patient perceptions of care, involvement in decision-making, and ability to get language assistance—disparities related to income were observed (Figure 5).

### PATHWAY TO EQUITY: IMPROVING WORKFORCE DIVERSITY TO REDUCE DISPARITIES

In our model, diversity of the health-care workforce is uniquely positioned to blunt health-care disparities and their effects on health disparities. As diversity in the U.S. population grows, increasing workforce diversity improves the likelihood that patients will find providers who speak their language and share their culture and values. In turn, improved patient-provider

**Figure 5. Number and proportion of measures of patient-centeredness tracked in the “2011 National Healthcare Disparities Report” for which members of selected groups experienced better, same, or worse quality of care compared with reference group<sup>a,b</sup>**



<sup>a</sup>Department of Health and Human Services (US), Agency for Healthcare Research and Quality. National healthcare disparities report, 2011. Rockville (MD): AHRQ; 2012.

<sup>b</sup>n = number of measures; better = population received better quality of care than reference group; same = population and reference group received about the same quality of care; worse = population received worse quality of care than reference group

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communication leads to better adherence to treatment recommendations and, ultimately, better health outcomes. Providers from diverse backgrounds, who are more likely to have observed prejudice in their own lives, may be more vigilant about preventing bias and more able to assist with the cross-cultural education of professional colleagues.

Workforce diversity also improves SDH that lead to health-care and health disparities. Minority health-care providers are often more willing to work in underserved communities and to provide care to low-income and minority patients.<sup>20</sup> Health-care providers living in the communities they serve bring income and knowledge about health and health care into the daily life of the neighborhood. They serve as and advise community leaders to invest health-care resources prudently and to bring additional health-care resources into the community. When disputes arise, they serve as liaisons to bridge the gap in understanding between communities and health-care facilities.

Another way to improve understanding between communities and health-care providers is through community health workers.<sup>21</sup> Community health worker interventions can improve knowledge of screening, prevention, and self-management, resulting in more appropriate utilization of services and significantly better outcomes—which have been demonstrated across a wide range of diseases and conditions, including asthma, diabetes, tuberculosis, and back pain.

The critical role of the health-care workforce in improving quality and reducing disparities is widely recognized in HHS. The National Strategy for Quality Improvement in Health Care,<sup>22</sup> our nation's strategic plan for achieving high-quality, affordable care for all Americans, identifies placing providers in workforce shortage areas and training health-care professionals in quality improvement and patient safety principles as essential elements for realizing its goals. Healthy People 2020 includes increasing the numbers of practicing primary care providers and training providers about cultural diversity as important objectives.<sup>23</sup> Increasing the diversity of the health-care and public health workforces and promoting community health workers are key strategies of the HHS Disparities Action Plan.<sup>3</sup>

### TRACKING WORKFORCE DIVERSITY

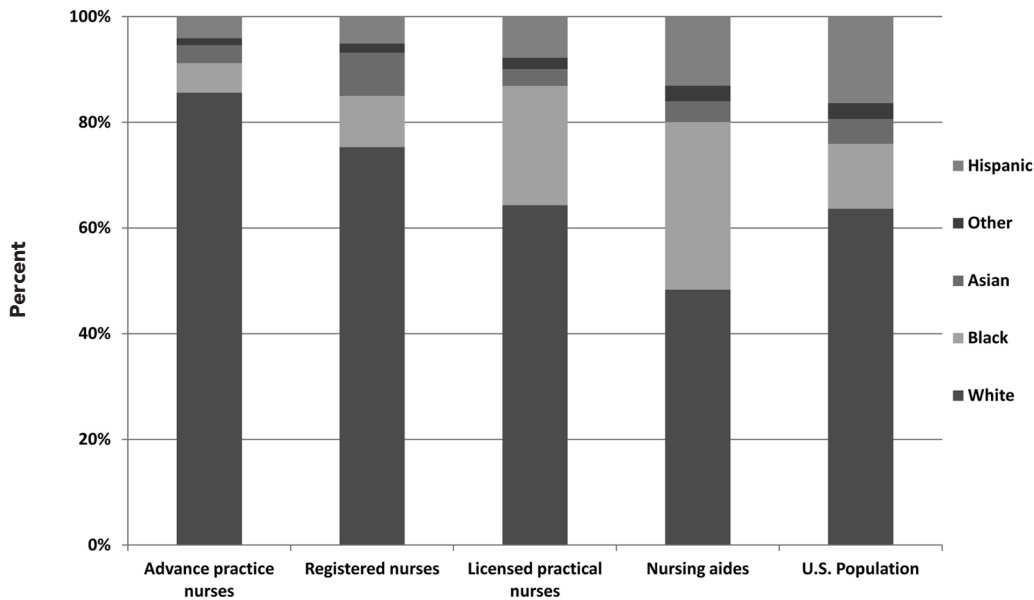
Unfortunately, America's health-care workforce often fails to match the diversity of its population. Since 2006, the National Healthcare Quality and Disparities Reports have tracked the diversity of U.S. nurses, physicians, dental professionals, pharmacists, and physical, occupa-

tional, and speech therapists and found inequities in all health-care professions. For example, the 2010 nursing workforce did not mirror the U.S. population (Figure 6). Among advance practice nurses, including nurse anesthetists, nurse-midwives, and nurse practitioners, white people are overrepresented relative to the overall U.S. population, and racial/ethnic minority groups are underrepresented. Among registered nurses, white and Asian people are overrepresented, while other racial/ethnic minority groups are underrepresented. Among licensed practical and vocational nurses, black people are overrepresented, while other racial/ethnic minority groups are underrepresented. Among nursing aides, black people are overrepresented, and white, Asian, and Hispanic people are underrepresented. Thus, white people tend to dominate nursing positions that require higher levels of education and generate higher incomes, while black people are overrepresented in nursing positions with less education and income. This finding suggests that one approach to improving the nursing workforce diversity may be to retrain licensed practical nurses to become registered and advanced practice nurses. Other approaches to improving nursing workforce diversity are addressed in other articles in this supplement.<sup>24–26</sup>

Improving the diversity of the health services research workforce is equally important. AHRQ grants support the conduct of health services research and the training and development of health services researchers. Of principal investigators on health services research grant applications to AHRQ, about 5% are nurses. Overall, the health services research workforce lacks diversity. Among health services researchers, white and Asian people are overrepresented relative to the U.S. population, while black and Hispanic people are underrepresented.<sup>27</sup> Improving the diversity of the health services research workforce has been identified as an important priority.<sup>28</sup>

AHRQ has funded programs aimed at diversifying the health services research workforce. The Minority Research Infrastructure and Support Program focused on building capacity at minority-serving institutions. The Building Research Infrastructure and Capacity Program focused on building infrastructure at institutions that did not traditionally receive AHRQ research grants. A Predoctoral Fellowship Awards for Minority Students program provided support for health-care-related research training leading to a Doctor of Philosophy or equivalent research degree to students from underrepresented racial/ethnic groups. Currently, AHRQ participates in the National Research Service Award program, which aims to diversify the research

**Figure 6. Racial/ethnic composition of nursing positions and the overall U.S. population: American Community Survey, 2010**



workforce and encourages diversity among trainees. All funding opportunities encourage applications from minority-serving institutions and individuals.

**IMPLICATIONS FOR PUBLIC HEALTH AND HEALTH CARE**

In an ideal world, all children would be born into families with ample social and economic resources to support healthy development. They would grow up in surroundings devoid of toxins and threats. They would learn healthy behaviors by example from all adults around them and receive timely, high-quality health care when ill. Defective genes could be excised and replaced by genes for long, healthy lives.

In our world, behavioral counseling and medical care are deemed more malleable than the environment or DNA, so they are relied upon to compensate for deficiencies in these other determinants. Unfortunately, barriers prevent public health and health-care workers from leading more patients to better health. Problems with access to care delay patients from receiving care when disease is preventable until disease causes permanent damage to the body and treatment is often hazardous, costly, and less effective. Problems with patient-provider communication prevent patients from adopting healthy lifestyles and adhering to treatment recommendations.

Taxonomically, public health workers improve the

health of populations by preventing disease, while health-care workers improve the health of individuals by treating illness and managing chronic conditions. In practice, new models of health-care delivery, such as accountable care organizations, hold providers responsible for populations of patients and share savings with them for keeping patient populations healthy. As health care has become unaffordable for many, public health organizations have developed the capacity to deliver needed care to individuals who would otherwise not receive it. Hence, problems with access to care and communication with patients affect public health and health-care workers alike. The uninsured are forced to seek care from those few providers that will see them, including public health departments and emergency rooms. Public health messages and health-care instructions fail when people do not understand the information, do not trust the source of the information, or lack the self-efficacy to act upon the information.

A more diverse public health and health-care workforce can protect against these problems. Minority public health and health-care workers may be more willing to serve in neighborhoods where barriers to care are prevalent and more adept at surmounting cultural and language barriers. Minority investigators are better positioned to engage disadvantaged communities in health services research. Efforts to improve workforce diversity, such as those described in this supplement, are key to overcoming health and health-care disparities



and achieving health equity. Federal initiatives such as the HHS Disparities Action Plan and the ACA need to continue to spotlight the salience of workforce diversity for maximizing the health of all Americans. Organizations that recruit, educate, and hire public health and health-care workers need to reaffirm their commitment to supporting the diverse workforce that best serves society's needs. Each year, the "National Healthcare Disparities Report" will track the success of these activities against disparities until this public health menace is eliminated.

The views expressed in this article are those of the authors and do not necessarily reflect those of the Agency for Healthcare Research and Quality or the U.S. Department of Health and Human Services.

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