vention and early intervention that could save the pool money in future expenses. An expanded income-based subsidy, analogous to the earned income tax credit, combined with a requirement that each person have evidence of ability to pay for minor and preventive care, would increase efficiency and equity. Some funds for such coverage are already included in Medicaid program expenditures.

This fundamental restructuring of the payment system would achieve both universal coverage and improved efficiency. Focusing attention on patient outcomes would free clinicians and hospitals to creatively explore ways to deliver care and eliminate payers' focus on fee constraints and micromanagement of clinical decisions. The government's role in the operation of the system would shift to ensuring information availability and transparency in payment. Government would maintain current employment-based subsidies (if a payroll tax is not substituted) and implement income-based redistribution for individuals with low incomes.

A collective risk pool would reallocate funds so all can access appropriate care regardless of their individual health status. The simplified system would eliminate unnecessary administration. Market-disciplined carriers would facilitate payment, provide information, and respond to patient preferences. Appropriate incentives would help ensure that health care expenditures are driven by informed patient and clinician decisions about the care needed to achieve high-quality outcomes.

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Health Disparities and Access to Health

Nicole Lurie, MD, MSPH
Tamara Dubowitz, MSc, SM, ScD

RACIAL AND ETHNIC MINORITIES—POPULATIONS WHO are more likely to be poor, have lower educational levels, or both—are fundamentally at greater risk of ill health than their nonminority, nonpoor, better educated peers.[1] Multiple factors, both within and outside the health care delivery system, probably explain these disparities. Health care and social factors associated with such disparities relate directly to access to care, and access to care is important because it is believed to lead to better health.

The ideals related to universal access to care might precisely be termed universal access to health, which, by definition, includes the elimination of health disparities. However, erasing disparities in health cannot be accomplished simply by achieving universal access to care; policies that affect public health and the nonmedical determinants of health are also necessary.

Author Affiliations: RAND Center for Population Health and Health Disparities, Arlington, Va.
Corresponding Author: Nicole Lurie, MD, MSPH, RAND Corp, 1200 S Hayes St, Arlington, VA 22302 (lurie@rand.org).

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Access to and Quality of Care

Differential access to care is one key contributor to disparities in health. Rates of uninsurance are substantially higher among Hispanics (34%) and blacks (21%) than among whites (13%).[2] To eliminate disparities in care, having health insurance is necessary but not sufficient. The availability of health insurance does not guarantee access to care—and certainly does not guarantee access to high quality of care. Eisenberg and Power[3] likened this phenomenon to an electrical system in which a current passes through a series of resistors, encountering voltage drops as it travels along the circuit. In the health care system circuit, individuals must enroll in available insurance plans that cover needed services, must be able to choose a primary care clinician whom they see regularly and consistently, and must be able to receive appropriate specialty services and high quality of care. Even then, communication challenges such as language differences between patient and clinician, or low health literacy, can impair the effectiveness of that care.[4,5]

Racial and ethnic minorities and individuals of lower socioeconomic status are more likely to experience these voltage drops, in that even once insured, they are less likely to enter the health care system, establish a regular source of care, or receive care of similar quality to their more advantaged and nonminority peers.[3] A report from the Institute of Medicine on disparities in health care concluded that racial disparities in the amount and quality of care exist even for similarly insured patients.[6] One implication of this conclusion is that actions to eliminate health disparities must go well beyond equalizing insurance coverage.

Thus far, much of health disparities research and efforts to address health disparities have focused largely on factors that are actionable within the context of the health care system. Disparities in care are increasingly viewed as a problem with quality, implying that methods to improve quality will narrow the disparities in care, and by extension, the disparities in health. Unfortunately, many of the uninsured are left out of efforts to address disparities through improving quality because they do not access the health care system.

Despite the limitations of focusing solely on the health care system, encouraging evidence suggests that some disparities in care are narrowing. For example, Trivedi et al[7] have shown that differences in receipt of a low-density lipoprotein cholesterol or a hemoglobin A_{1c} test between blacks and whites enrolled in Medicare have narrowed substantially, a sign of what can happen when quality is measured and reported. However, these improvements were not accompanied by similar reductions in either lipid or glucose control for those with heart disease or diabetes, suggesting that narrowing disparities in long-term outcomes—or disparities in health—cannot be achieved by simply ordering appropriate tests or prescribing appropriate medication. Although quality measures may be based on incorrect metrics (eg, process of care vs outcomes achieved), these seemingly paradoxical findings also suggest that the solution to reducing disparities in outcomes entails far more than what health care services can provide and that there is a complex interplay of health care, public health, and social factors at work.

Public Health and Nonmedical Determinants

Health is the result of an individual's genetic makeup, income and educational status, health behaviors, communities in which the individual lives, and environments to which he or she is exposed. Indeed, the contribution of health care to health status is modest, estimated to be approximately 15%.[8] Although a person's genetic composition is established, other factors—environment, health behaviors, community resources, and even income—can be influenced by a combination of a robust public health system and changes in social and economic policy. Public health efforts have been critical for eliminating disparities in exposure to environmental toxins (eg, lead and asbestos), promoting healthful behaviors (eg, smoking cessation and physical activity), and improving community resources (eg, parks, lighting, and sidewalks in disadvantaged neighborhoods). These actions can help prevent disparities in the incidence and prevalence of chronic disease. Surveillance and disease-control efforts contribute not only to the health of the population overall but to the health of low-income and minority populations who are more likely to experience higher incidence, morbidity, and mortality from infectious diseases (eg, human immunodeficiency virus or tuberculosis).[9]

In addition to the role of individual socioeconomic and psychosocial determinants of health, characteristics of the neighborhood in which one lives also have an independent effect on health.[10] Researchers are even beginning to identify biological pathways through which individual and neighborhood socioeconomic status, for example, "get under the skin."[11] Some of these pathways involve excess cortisol, inflammation, oxidative stress, and gene methylation and are associated with increased risk of chronic diseases such as coronary heart disease, diabetes, and certain cancers.[12]

How might the transformation from environment to poor health occur? One proposed mechanism is residential racial segregation which, over a century in the making, leads to racial differences in socioeconomic status.[13] Individuals who are members of racial/ethnic minority groups are likely to have lower individual socioeconomic status and are more likely to live in racially and economically segregated and stressful environments that lack resources, such as employment opportunities; high-quality, affordable food; and safe places in which to play and be physically active. These neighborhoods are also more likely to contain environmental toxins and have higher rates of crime. Neighborhood disadvantage also links back to the health care delivery system; access to care in such neighborhoods is also poor. In addition to having higher rates of uninsurance and sicker populations, health care services in such neighborhoods may also

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operate at a disadvantage. For example, Bach et al[14] reported that approximately 20% of physicians care for 80% of the black population in the United States. Those physicians disproportionately report that they are less able to access resources for their patients, including specialty consultation and diagnostic tests.

Several health plans that are part of the National Health Plan Disparities Collaborative, a group of health insurance policy makers addressing racial/ethnic disparities in care, have found that in sociodemographically similar neighborhoods, members living in one neighborhood may receive elements of high-quality care while those residing in another do not.[15] This suggests that the causes of disparities in care are not as simple as either insurance or socioeconomic status but that other factors are likely to be operating. Thus, insurance coverage, quality of care, public health measures, and community resources all appear to be important in addressing disparities in care and in health.

Policies to Reduce Disparities in Health

Is the goal of narrowing disparities in health achievable? There is cause for optimism in the finding that some countries achieve both universal access to care and have better health outcomes, including fewer health disparities. Some national governments have enumerated the kinds of policies likely to improve health.[16,17] In Britain, the Acheson Commission provided a set of 39 evidence-based recommendations for social policies that could contribute to such a goal. Notably, only 3 of these recommendations pertained directly to health care. In the United States, the Centers for Disease Control and Prevention publishes the Community Guide, an evidence-based analysis of interventions that would improve heath,[18] including interventions targeted at the health care system (eg, reducing financial barriers to vaccination and disease management), the public health system (eg, community-wide campaigns to promote physical activity and immunization programs), and the social environment (eg, comprehensive early childhood development programs and tenant-based rental voucher or housing mobility programs).

Some social conditions that contribute to poor health may be amenable to federal policy changes, such as improving income by increasing the minimum wage or expanding the earned income tax credit. Improving environmental air quality could improve health and reduce Medicare expenditures.[19] The law offers a panoply of tools for improving health; for example, legal approaches could be used to facilitate more healthful lifestyles and help address obesity.[20]

Fortunately, neither improving access nor solely focusing on conditions that promote health is exclusively dependent on federal policy. State and local policies may also play a role. From an access perspective, in California, parents of children newly enrolled in the State Children's Health Insurance Program reported that their children performed better in school, felt better physically, and were able to get along better with their peers than they did before they had insurance.[21] Furthermore, ethnic disparities in children's access to health care were largely reduced. Several other states including Massachusetts, Vermont, California, and Maine have recently initiated plans for universal coverage.[22]

States are enacting health-promoting legislation. Following the lead of California, some are moving to set limits on automobile and factory emissions. Local incentives have helped locate supermarkets in low-income areas. Citizens of Los Angeles passed a bond initiative to renovate city parks. Local zoning ordinances that limit urban sprawl and promote walkable communities are becoming more widespread. Governments at all levels could develop creative approaches if their administrative entities, whether cabinet-level departments or city governmental units, convened regularly to identify opportunities to enact health-promoting policies.

A substantial proportion of US physicians view issues related to access to care, public health influences on health, and nonmedical determinants of health as important areas for their public responsibilities.[23] However, far fewer physicians reported being engaged in community participation, political action, or collective advocacy regarding these topics in the past 3 years. Increased engagement of health professionals of all types may also be necessary—although not sufficient—to move the nation toward universal access to health care.

Medicine and public health have been likened to trains running on parallel tracks, never to meet.[24] Social and economic polices that affect health are often viewed as the third rail. However, bringing together medical care, public health, and other policy reforms that address the nonmedical determinants of health will be essential for making progress on health disparities. Such approaches are likely to improve access to care, access to health, and ultimately reduce health disparities.

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Structural Impairments That Limit Access to Health Care for Patients With Disabilities

Kristi L. Kirschner, MD
Mary Lou Breslin, MA
Lisa I. Iezzoni, MD, MSc

THE FOLLOWING 3 CASES REPRESENT SUBSTANDARD CARE for patients with disabilities, yet they occurred recently at US tertiary care medical centers with the latest technologies and well-qualified physicians. These failures resulted from basic, "low-tech" structural deficiencies—lack of accessible call systems, diagnostic equipment, and examination tables.

Joe is paralyzed, dependent on a ventilator, and unable to speak. His hospital room was at the end of the corridor and had no accessible call system to summon assistance. When his ventilator became disconnected and then was not promptly recognized, Joe became extremely anxious about being in a hospital.

Susan, who uses a wheelchair, had trouble breathing. She needed an echocardiogram, which was performed while she sat in her wheelchair. The echocardiogram was of poor technical quality and yielded little information.

Chuck has paraplegia and new rectal bleeding. The gastroenterologist refused to perform a diagnostic flexible sigmoidoscopy because the office did not have wheelchair-accessible examination tables or lifting provisions. He sent Chuck home with 3 hemoccult cards.

Despite passage of the Americans with Disabilities Act (ADA) in 1990, inaccessible facilities, equipment, and communication systems still compromise health care experiences for individuals with disabilities in the United States.[1-3] Although no direct evidence currently exists about the population prevalence of these problems nationwide, increasing numbers of legal cases, small studies, and circumstantial evidence point to widespread access barriers for patients with disabilities within US health care settings.

This commentary reviews the legal and policy contexts for ensuring physical accessibility to health care facilities and also considers potential effects of environmental barriers on patient safety, quality of care, and health care worker safety. These contexts involve 3 fundamental concepts. First, environmental barriers contribute significantly to disability.[3] Second, the architectural notion that form follows function holds important implications for health care, where creation of therapeutic environments is a core value. The barriers that disabled patients confront represent quality problems and also heighten patients' sense of stigmatization, disenfranchisement, and demoralization.[4] And third, the concept of universal design, human-centered design that keeps all potential users in mind,[3] recognizes the diversity of patient populations, health care professionals, other workers, and all individuals using these environments. Just as health care has worked toward achieving racial, ethnic, and cultural diversity, the time has come to embrace bodily diversity. Instead of sorting into binary categories of able vs

Author Affiliations: Rehabilitation Institute of Chicago, Northwestern University Feinberg School of Medicine, Chicago, Ill (Dr Kirschner); Disability Rights Education and Defense Fund, Berkeley, Calif (Ms Breslin); and Harvard Medical School, Institute for Health Policy, Massachusetts General Hospital, Boston (Dr Iezzoni).
Corresponding Author: Kristi L. Kirschner, MD, Rehabilitation Institute of Chicago, 345 E Superior St, Room 1136, Chicago, IL 60611 (kkirschner@ric.org).

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