

## **Realigning Health with Care**

By Rebecca Onie, Paul Farmer, & Heidi Behforouz

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# Realigning HEALTH *with* CARE LESSONS IN DELIVERING MORE WITH LESS

The misalignment between the expansive goal of “health” and a cramped definition of “care” has cost the United States untold lives and treasure. Yet realignment is in reach: Through expanding the scope of health care, the place where it is delivered, and the workforce that provides it, the US health care system could significantly improve health outcomes and reduce inefficiencies.

BY REBECCA ONIE, PAUL FARMER, & HEIDI BEHFOROUZ

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Everyone knows the US health care system is in crisis. We spend far more on health care than any other nation—a breathtaking \$2.6 trillion annually, according to a 2011 report by the Kaiser Family Foundation. The US Department of Health and Human Services estimates that health care expenditures will be 25 percent of US GDP by 2025, twice what many developed countries currently expend.

The burden of rising health care costs falls not just on individuals—half of all personal bankruptcies are at least partly due to medical expenses—but also on US companies. At General Motors, health care costs put the company at a \$5 billion disadvantage against Toyota.<sup>1</sup> The same is true for federal, state, and local governments. In Massachusetts, for example, school employees' health care costs rose \$1 billion from 2000 to 2007, crowding out growth in nearly every other area of the state budget.<sup>2</sup>

Despite such spending, US health indicators are among the worst of high-income countries. Since 1960, the United States dropped from 12th to 46th in infant mortality rankings (below Cuba and Slovenia), and from 16th to 36th in life expectancy (below Cyprus and Chile), according to the CIA's World Factbook. In certain neighborhoods in Baltimore, Chicago, and Los Angeles—and other communities across the country—life expectancy for subsets of the population is lower than in Bangladesh.

Such ineffective spending is bad enough. In the coming years, additional factors will keep our health care system from providing high-quality care to all those who need it. Two high on the list are a shortage of primary care doctors and rising poverty.

Primary care doctors are the key to improving value-based care: By focusing on preventive services, care coordination, and disease management, they can reduce unnecessary health care costs. In the 1960s, half of the doctors in the United States worked in primary care. Today, barely 30 percent do. And this trend is deepening: From 2000 to 2005, the percentage of US medical school graduates who chose to enter primary care dropped from 14 percent to 8 percent, creating a projected shortfall of up to 150,000 primary care physicians by 2025.<sup>3</sup> More than 56 million Americans—greater than one-fifth of the US population—already live in areas with too few primary care physicians, according to the National Association of Community Health Centers.

There are many reasons doctors eschew primary care. The fee-for-service reimbursement system has incented tertiary care and

episodic crisis management. Primary care providers are thus often paid less than specialists, with specialization acquiring particular cachet among medical students and residents. Moreover, for those who do choose primary care, the job is especially taxing because of the high demand for services and the absence of sufficient support to meet patients' nonmedical needs—access to healthy food or heat in the winter, for example—which often thrust themselves into the doctor's office, especially in a shaky economy. Few physicians have been trained to confront these social issues that often thwart conventional medical care. In a recent poll of 1,000 primary care physicians across the country, 80 percent said they were not confident in addressing their patients' social needs, even though those needs undermined their patients' health.<sup>4</sup>

Ironically, health care reform will make the problem worse, not better. Expanded insurance coverage will increase the number of patients seeking care, but from the same number of physicians. In Massachusetts, where universal coverage became law in 2006, there are critical shortages of primary care doctors—more than half do not accept new patients, and most report dissatisfaction with the practice environment, according to a 2011 Massachusetts Medical Society report.

With 21 million potential Medicaid patients poised to enter the health care system in 2014, primary care physicians will face a double burden: caseload constraints coupled with at-risk patients' substantial social needs. Poverty seeps into emergency rooms and inpatient wards and pervades the health system. Half of the adults who will gain insurance eligibility in 2014 are very poor (with incomes below 50 percent of the federal poverty level), a third have a diagnosed chronic medical condition, and many are likely to have long-neglected health care needs due to years without coverage.

The links between poverty and poor health are well known: Food-insecure children, now numbering 17 million in the United States, are 91 percent more likely to be in fair or poor health than their peers with adequate food, and 31 percent more likely to require hospitalization.<sup>5</sup> Children under age 3 who lack adequate heat (another 12 million) are almost one-third more likely to require hospitalization.<sup>6</sup> And families with difficulty paying rent and housing-related bills face increased acute care use and emergency room visits.<sup>7</sup>

Unfortunately, social workers and case managers—traditional first responders for patients' social needs—are overloaded, too. New York-Presbyterian Washington Heights Family Health Center, for example, has only two social workers for the clinic's 46,000 patients. This is sadly typical. Even if all the United States' 24,750 licensed medical and public health social workers in clinic or hospital settings served *only* Medicaid patients—and many serve none at all—there would still be just one social worker for every 2,404 patients.

But it doesn't have to be this way. Models of health care delivery that improve patient outcomes while cutting costs are cropping up with increasing frequency. Further, in the last 20 years, public, private, and philanthropic entities have invested billions of dollars learning how to build health care systems *despite* extreme resource constraints, too few doctors, and overwhelming poverty. Some of these models have been pioneered in the United States; many come from other countries. One characteristic they share is a broader conception of health care. Given the challenges facing the US health

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system, policymakers and others advocating health reform would do well to give a hard look at some of these alternative models.

Indeed, the innovation we need is right in front of us. In his 2009 best-seller *The Checklist Manifesto*, surgeon and journalist Atul Gawande eloquently argues that medical “innovation” is less about discovering new interventions than it is about properly executing the ones we already have. As Gawande explains, failure more often stems from ineptitude (not properly applying what we know works), rather than ignorance (not knowing what works). “The knowledge exists,” he writes, “yet we fail to apply it correctly.” As one example, Gawande cites a five-point checklist implemented in 2001 in the intensive care unit at Johns Hopkins Hospital. Although the checklist merely summarized well-known best practices of administering drugs to a patient’s body through a “central-line” tube, its consistent use virtually eradicated central-line infections. A subsequent use of the checklist in intensive care units in Michigan caused infections to drop by 66 percent and saved more than 1,500 lives in a year and a half.

We contend that Gawande’s insight about the benefits that could be reaped by deploying existing innovations extends beyond the operating room and hospital to the very structure and orientation of health care itself. The depth and breadth of the US health care crisis has led some to throw up their hands. Others imagine grand reconstructions of health care roles, incentives, and behaviors. Between these extremes are concrete adjustments that will save lives and dollars—in short order. Drawing on lessons learned from high-quality health care delivered in resource-poor settings here and overseas, the US health system can finally shed the inefficiencies of habit and history.

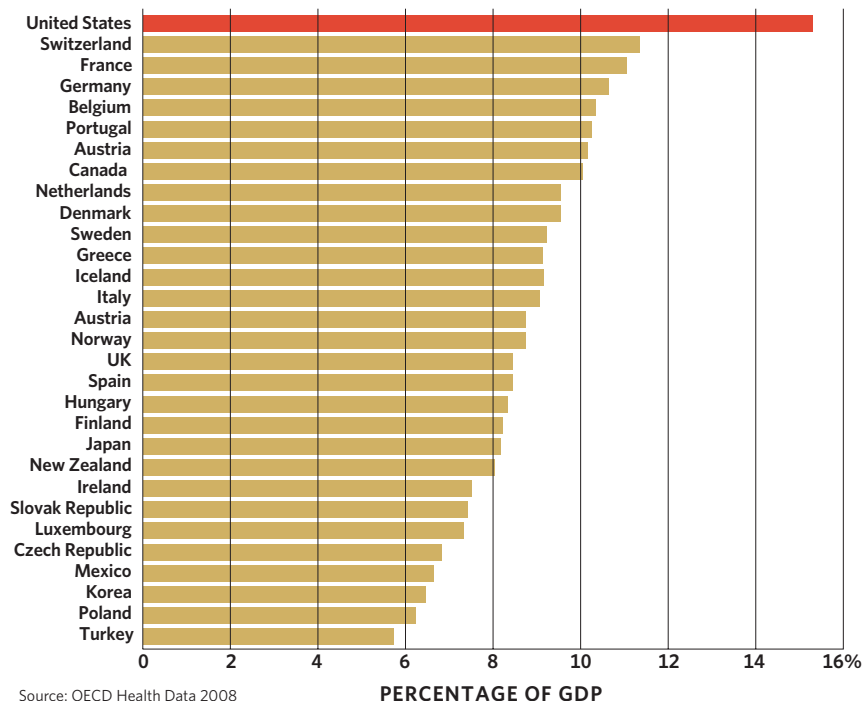
## BROADEN DEFINITIONS OF PRODUCT, PLACE, AND PROVIDER

In the developing world, health care providers must adapt to limited financial resources, scarce health care professionals, underdeveloped health infrastructure, and widespread poverty—all in settings with huge burdens of preventable and treatable diseases that too often go untreated. Some of the lessons that have emerged are well worth examining. Just as the United States sought advice about counterterrorism from Israel after 9/11, and about post-disaster reconstruction from Kosovo after Hurricane Katrina, we should look beyond US shores for new ideas about health reform.

Although the landscape of health risk and the systems charged with providing care differ by nation, resource-poor settings face common problems and have often devised similar solutions. Specifically, these solutions broaden conceptions of *product*, *place*, and *provider* in health care.

**Product** | What is being delivered when we say “health care”? In the United States, we usually mean medicines, diagnostic tests,

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and hospital services. We rarely include basic necessities, such as food, housing, or heat, even when their absence leads to ill health. In a 2007 study at Johns Hopkins Medical Center, 98 percent of pediatric residents said that referring well-child patients for help with basic needs could improve the children’s health. But how many of those residents routinely screened their patients for food sufficiency? Only 11 percent.<sup>8</sup>

In contrast, in resource-poor settings, health care providers have no choice but to design programs based on the stubborn relationship between poverty and ill health, and to start from the premise that health care must mean more than medicine.

The UN World Food Programme, for example, provides nutritional supplements alongside HIV drug therapy in recognition that “Food and nutrition support is essential for keeping people living with HIV healthy for longer and for improving the effectiveness of treatment.” A Haitian proverb is perhaps more to the point: “Giving drugs without food is like washing your hands and drying them in the dirt.”

In Brazil, Associação Saúde Criança (ASC) has operationalized this concept by routinely sending low-income children home after hospitalizations with resources for ongoing nutrition, sanitation, and psychological support. “Children cannot be discharged from hospital without first ascertaining what conditions await them at home,” notes ASC in its organizational overview. The idea is not to expand doctors’ work beyond medicine, but to improve the ability of health systems to address structural, nonclinical determinants of health, and therefore reduce recurring hospitalizations and associated costs.

**Place** | In addition to a broad conception of health care, resource-poor settings demand a more expansive view of the *place* in which care is delivered. Most care, in countries rich and poor, is delivered outside the formal health system—in homes and communities. In the

words of medical anthropologist Arthur Kleinman, “for all the efforts of the helping professions, caregiving is for the most part the preserve of families and intimate friends, and of the afflicted person herself or himself.”<sup>9</sup> Health providers can leverage such local networks of care by integrating health care into patients’ daily lives, and locating health resources where (and when) patients are most likely and able to access them. Moving health resources from clinics—often remote from patients in distance and culture—into homes and communities, or alternatively, bringing critical social resources—which are themselves instrumental to the efficacy of medical care—into hospitals and clinics, can improve access to and quality of health care.<sup>10</sup>

Locating health resources in homes and communities as well as putting them in clinical facilities recognizes the role of environmental interventions in improving health outcomes. In *Nudge: Improving Decisions About Health, Wealth, and Happiness*, Richard Thaler and Cass Sunstein describe how “altering the choice architecture” can, without coercion, adjust the placement, sequence, and context in which people make choices with an eye toward increasing the common good. A typical example is altering the choice architecture in a cafeteria by placing healthy snacks at eye level and sugary snacks on the top shelf, increasing the likelihood that people will choose the healthy ones.

In Haiti’s Central Plateau, the challenge of place is not one of choice but of necessity: With just one doctor for every 50,000 people, Partners in Health (PIH), a medical nonprofit that has worked in Haiti for almost three decades, rejects the notion that the infrastructure gap makes it impossible to deliver high-quality health care to the poor. PIH trains patients and other community members to act as health care liaisons in their homes and communities, observing the ingestion of pills, responding to patient and family concerns—including structural barriers to care, such as high transport costs or shoddy housing—and spotting symptoms of illness or side effects of medication. Just as they have taken health to the community, PIH brings the community to the health care facility by, for example, operating farms adjacent to clinics to integrate anti-malnutrition efforts into medical care.<sup>11</sup>

**Provider** | Widening conceptions of product and place demands also widening the definition of health care *provider*. Nontraditional medical workers are critical to health systems, especially those in resource-constrained environments. They are less encumbered by competing clinical care priorities, possess firsthand understanding of patient culture, community, and experience, and are often more aware of nonmedical local resources that may improve patient care. Acknowledging that licensed clinicians are not the only health care providers can help health systems become more efficient, effective, and equitable.

PIH, for example, relies on doctors and nurses to provide clinic- or hospital-level care and hires community health workers (CHWs) to distribute food, deliver medicine to patients in remote rural areas, and identify undiagnosed illnesses as well as social needs. CHWs can help health care systems overcome shortages of human and financial resources by providing high-quality, low-cost services to community members in their homes and by diagnosing diseases in their early stages, before they become more dangerous and expensive to treat.

Similarly, in sub-Saharan Africa, Mothers2Mothers trains and employs new mothers with HIV, who work side by side with doctors and nurses in health care facilities and are responsible for ensuring

that patients understand and adhere to antiretroviral treatments and other prescribed interventions. These “Mentor Mothers” are a new tier of paid, professional, health care providers—drawn from, trained in, and working for local communities. Evaluations of the program have found that enrolled mothers are more likely to receive and take medications and to undergo tests to determine if they are eligible for antiretroviral treatment and if their babies are infected with HIV.

Broadening the health care workforce enables doctors, nurses, social workers, and other professionals to “practice at the top of their license”: They can spend more time doing what they are trained to do, while leaving critical tasks like coaching patients and connecting them to community resources to other health care workers. The World Health Organization summarized the utility of this “task shifting” in a 2008 report: “The rational redistribution of tasks among health workforce teams will maximize the efficient use of health workforce resources.”

US health professionals, in contrast, tend to take one of two (largely ineffective) approaches. Most often, as noted in the Johns Hopkins study mentioned earlier, health care providers bracket patients’ social needs, deeming issues like hunger, poor housing, and indebtedness beyond the scope of short patient-doctor visits. Some primary care clinicians do try to address patients’ basic social needs. But they quickly become overloaded, and addressing such needs crowds out other key modalities of their clinical practice. A June 2011 Health Leads survey at Bellevue Hospital in New York City discovered that doctors spend an average of 9.2 minutes of each 15-minute patient visit on social needs.

Practicing at the “bottom” of one’s license can be expensive for taxpayers, is draining (or demoralizing) for clinicians, and causes patients to wait longer to get timely and effective care. Task shifting—or task sharing, to be more precise—can reduce such inefficiencies. Although evolving financial incentives in the US health care system, including increased risk sharing between insurers and medical providers for patient outcomes, has begun to catalyze increased task sharing, there is ample room in the health system to broaden our conception of what it means to be a provider of health services.<sup>12</sup>

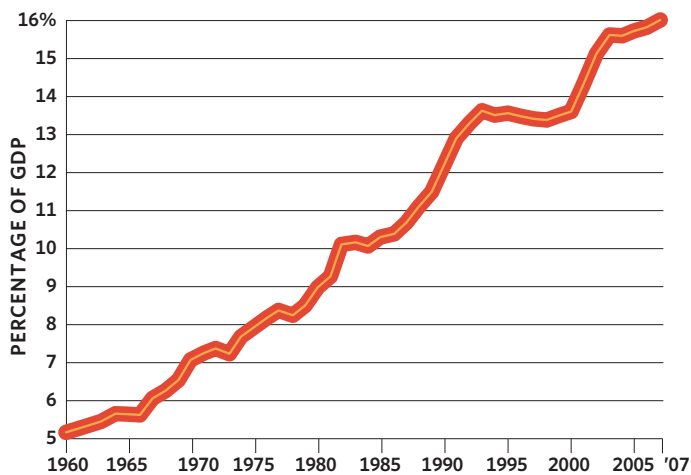
## APPROACHES ALREADY UNDER WAY

In the last two decades, some health care organizations in the United States have developed delivery models based on more expansive definitions of product, place, and provider. The results have been promising.

The Prevention and Access to Care and Treatment (PACT) program, a domestic arm of PIH, serves the sickest and most marginalized HIV-positive and chronically ill patients in Greater Boston. Applying the principles described above—that health care means more than clinical care, that health-related resources must be located in patients’ communities, and that the health care workforce must leverage trained nonclinical personnel—PACT has helped raise the standard of care, while cutting costs in some of the poorest parts of Boston.

Specifically, PACT supplements comprehensive medical care with “wraparound” antipoverty services. Its model is built on accompaniment: CHWs are trained and paid to supplement clinical care and deliver social support services, health promotion, and harm reduction

## US Health Care Spending



Source: OECD Health Data 2009

services within patient homes and communities. This model is an example of “reverse innovation” from a successful program in rural Haiti, adapted for use in an American city. By accompanying patients to important visits and communicating regularly with licensed clinicians, CHWs ensure that treatment recommendations are patient-centered. CHWs visit patients’ homes to provide directly observed therapy, supervising patients while medication is being administered, and to help them overcome structural and psychosocial hurdles to wellness. Their tasks range from motivating medication adherence to surveying patients’ pantries and helping them identify ways to make healthy, affordable meals. In so doing, CHWs help patients more effectively self-manage their illnesses.

The program has realized impressive results. Seventy percent of its AIDS patients show significant clinical improvement, whether measured by viral load, CD4 count, incident opportunistic infections, or emergency room visits.<sup>13</sup> Costs to Medicaid have dropped significantly, thanks to a 60 percent decrease in hospitalization rates among enrolled patients: One analysis of Medicaid claims from PACT patients showed 16 percent net savings. Similar gains are being made among patients with multiple chronic diseases and behavioral health comorbidities. The PACT model is now being replicated in New York City, Miami, and the Navajo Nation.

Such “reverse innovation” often occurs when providers serving the poor in affluent countries travel to poorer countries struggling with access to care for the majority. In 1996, Dr. Rushika Fernandopulle went on a medical mission to the Dominican Republic. There he saw *promotoras*, community health workers who coached individual patients through medical compliance and recovery. When Fernandopulle was named to run the Special Care Center (SCC) in Atlantic City, N.J., which serves the 14,000 union employees of Atlantic City’s restaurants, hotels, and casinos, he adapted the *promotoras* model, expanding the health care product and provider.

Under the guidance of SCC doctors, “health coaches” see patients at least once every two weeks and regularly communicate by phone and e-mail, helping them achieve healthier lifestyles and manage chronic disease. Like PACT’s community health workers, the coaches

are recruited from within the community and speak the patients’ language, often connecting more successfully than doctors might about patients’ true difficulties and helping them identify realistic solutions. The doctors, social workers, nurse practitioners, and health coaches meet as a team every morning to review the medical and nonmedical issues facing their patients.

A program evaluation found that after 12 months in the program, patients’ emergency room visits and hospital admissions dropped by more than 40 percent and surgical procedures fell by 25 percent. Among 503 patients with high blood pressure, only two were in poor control of it at the end of the study. Patients with high cholesterol experienced, on average, a 50-point drop in cholesterol level. And a remarkable 63 percent of smokers with heart and lung disease quit smoking, Gawande reported in a Jan. 17, 2011, *New Yorker* article. Meanwhile, the cost of care for these patients rose by only 4 percent per year, compared to 25 percent before they began participating.

Health Leads likewise widens the frame of health care, broadening the health care product to include connections to basic resources like food and housing; broadening the health care place by using hospital waiting rooms to make resource connections; and broadening the health care provider, by integrating college volunteers into the health care team.

Located in primary care and prenatal clinics in six US cities, Health Leads empowers doctors, nurses, and other health care providers to ask the previously un-askable questions: Are you running out of food at the end of month? Do you have safe housing? These providers can then write “prescriptions” for food, housing, heating assistance, or other basic resources, just as they would for medication. The patients take their prescriptions to the clinic waiting room, where Health Leads’ 1,000-member corps of college volunteers works side by side with them to secure these resources. The volunteers’ assistance is often as straightforward—but critical—as tracking down an agency phone number, completing a benefits application, or bridging language barriers.

Health Leads leverages providers’ scarce time, so that they can focus on activities that demand their training and experience. At Harlem Hospital Center, for example, an electronic medical record automatically refers all patients with an elevated body mass index—an indicator of obesity—to Health Leads for help in accessing healthy food, exercise programs, and other resources. A recent study at the Dimock Center, a Boston community health center, found that Health Leads increased the clinic social worker’s ability to provide reimbursable therapeutic services to children by 169 percent, improving the quality of care while generating additional revenue for the health center. This is just one example of the several ways in which the definition of provider might be expanded: *promotoras*, community health workers, and college volunteers each possess different competencies, but all can increase the efficiency and quality of care delivered to patients.

## AN OPEN WINDOW

The United States is poised for a primary health care transformation. The health care system is in crisis, driven chiefly by escalating costs, suboptimal health outcomes, scarce primary care resources,



and rising poverty. At the same time, thanks to grassroots innovation—and, in some cases, US-based funding—a growing number of health providers around the globe have learned to deliver high-quality health care at low cost. Now we need to align our resources in the United States to bring this knowledge fully to bear in saving dollars and lives.

And the time is, indeed, now. The dual, market-driven imperatives to cut costs and improve outcomes—and the inevitable shift away from fee-for-service reimbursement to shared risk between payers and providers—create an unprecedented receptiveness to new approaches in care delivery. The United States has a window of opportunity to seize this fluidity in the sector to broaden the health care product, place, and provider and thereby expand access, improve outcomes, and cut costs. This approach demands, as Gawande says, that we innovate by properly executing the solutions we already have—and that the private, philanthropic, and public sectors invest in these evidence-based models of health care delivery.

**Private Sector Creativity** | Recognizing the opportunity for significant returns in a sector that currently comprises 17.6 percent of GDP, private sector groups have long invested in some components of the health care industry. Last year, US venture capital firms invested \$2.38 billion in medical devices and \$3.78 billion in biotech.<sup>14</sup> Private equity dollars also increasingly are focused on the health care sector, as restructuring inefficient hospitals can be especially lucrative. The initial public offering in 2006 of the Hospital Corporation of America, a for-profit hospital chain backed by KKR & Co., Bain Capital, and Bank of America, was the biggest private equity-backed offering in history, raising \$32 billion.<sup>15</sup>

Deployed strategically, even a fraction of these private sector dollars could accelerate a broadening of the definition of product, place, and provider to drive down overall costs and improve outcomes. One compelling, if unconventional, example is the so-called retail clinic. An alternative to lengthy waits in the emergency room or the challenge of getting to the doctor's office during working hours, retail clinics typically offer brief visits with an advanced-practice provider (physician assistant or nurse practitioner) who can provide immunizations and care for simple illnesses in a retail store, such as CVS and Wal-Mart. The clinics are open evenings and weekends; they provide care that is roughly 30 to 40 percent less expensive than similar care at a doctor's office and 80 percent less expensive than the cost of an emergency room visit.<sup>16</sup>

Retail clinics broaden the health care place from the doctor's office to the shopping mall. They are, in a sense, a US analog of PIH's *accompagnateur*-based service delivery model in rural Haiti. (The financing models, however, are divergent: PIH depends not on out-of-pocket financing but on philanthropic and public sector support.) Not surprisingly, 35 percent of patients visiting retail clinics are underinsured or have no coverage at all—according to Tine Hansen-Turton, executive director of the Convenient Care Association—and thus would almost certainly be using the emergency room or not receiving care at all in the absence of this care delivery model. Yet, as Julie Appleby reports in the Nov. 17, 2011, issue of *Kaiser Health News*, “The clinics see a pure business opportunity based on consumer convenience and cost savings, which they can market

to the public, employers, insurers, and hospitals.”

We have an opportunity to leverage private sector investments in new care delivery models that generate revenue or cost savings and address the nonclinical needs of low-income patients, who are among the most “costly” consumers of health care. If the PACT model, for example, yields 16 percent savings for Medicaid, why isn't it attracting private sector dollars to scale up regionally or even nationally? If the booming electronic health records market designed products that captured nonclinical data (such as whether a patient is living in a shelter or running out of food each month), health care providers would be far better positioned to negotiate bundled or capitated payments that reflect the true cost of delivering care for vulnerable patient populations.<sup>17</sup> Given the size of the health care market—and the dollars spent delivering unnecessary health care—private sector players could likely sustain profits from scaling up cost-saving models of comprehensive, community-based care for the poorest.

**Philanthropic Sector Investment** | The philanthropic sector also should recognize the opportunity represented by domestic health care reform. In 2008, US foundations invested more than \$2.5 billion in global health, according to the Foundation Center. The Bill & Melinda Gates Foundation alone has committed \$15.3 billion to nondomestic global health efforts since 1994—more than twice as much as it has invested in all US-based programs combined. These investments have saved countless lives and untold suffering; they also have yielded critical insights into how to improve health outcomes amid severe resource constraints—and, in particular, how to do so by broadening the health care product, place, and provider.

The philanthropic sector now has the ability to secure the full return on investment from past grants by adapting lessons learned to the US context. Global health programs should also be continued, expanded, and bolstered with insights developed in poor communities in the United States.

The Center for High Impact Philanthropy, in its January 2012 report *Women's Health and the World's Cities*, cites the example of the Nurse-Family Partnership, funded by the Edna McConnell Clark Foundation and BRAC's Manoshi Project in Bangladesh. The partnership's programs achieved great value by applying shared principles: reaching women in their homes, providing links to referral systems, creating partnerships and networks that address the root causes of ill health, and developing a critical feedback loop to improve performance and generate data for others seeking to adopt a similar model.

Another example is the Gates Foundation's \$15 million award to the Last Ten Kilometers (L10K), a project that addresses health care provider shortages and lack of access to health care in remote areas of Ethiopia. L10K trains local volunteers to demonstrate healthy behaviors pertaining to prenatal care and maternal and child health in their own households, and thus serve as model families in their communities. But securing adequate prenatal care is also a significant challenge for low-income women in the United States, as evidenced by vivid disparities in infant mortality rates: African-American infants are twice as likely to die in the first year of life as Caucasian infants; in some cities, the infant mortality rate for African-American infants is five times higher.<sup>18</sup> Basic



prenatal care can significantly reduce infant mortality, but poor women in the United States often gain access to such care later in their pregnancies and have fewer prenatal visits.<sup>19</sup> The Gates Foundation could secure the full return on its investment in the L10K project and accelerate improvements in health outcomes in the United States by leveraging L10K's core elements, including a broader definition of provider (to include community health workers) and place (to include household- and community-based modeling of prenatal care).

**Public Sector Funding** | Philanthropic and private sector investment cannot by themselves shift the direction of health care delivery. Government funding streams will always drive decision making, especially with respect to health care provision to low-income people. At long last, policymakers are reevaluating the incentive structure—often inefficient, sometimes perverse—of the US health care system. How will their decisions affect providers and patients? What are the corresponding implications for both costs and health outcomes?

Although the 2010 Patient Protection and Affordable Care Act makes significant strides toward expanding insurance coverage and improving quality of care, it leaves unchanged one of the most problematic aspects of Medicaid: It does not reimburse the activity of connecting patients to essential nonclinical resources they need to be healthy, or to any other services delivered by non-clinicians that address the underlying causes of poor health outcomes.

To the contrary, the Centers for Medicare & Medicaid Services' State Medicaid Manual, which advises states on implementing Medicaid programs, explicitly forbids such reimbursement: "[C]ase management related to obtaining social services, Food Stamps, energy assistance, or housing cannot be considered a legitimate Medicaid administrative expense even though it may produce results which are in the best interest of the recipient."<sup>20</sup>

Nor are such services generally reimbursable as a nonadministrative expense. States may opt to provide through Medicaid "Targeted Case Management," which reimburses efforts to connect patients to certain social services. But its scope is limited to care management for chronically ill and complex patients, such as foster youth and patients with AIDS, mental health conditions, and developmental disabilities. In short, Medicaid does not support nonclinical services as a pillar of primary care—even though it could bring substantial downstream cost savings.

The good news is that there are easy ways for the federal government to use Medicaid to incentivize health programs with more expansive conceptions of product, place, and provider: by broadening eligibility for Targeted Case Management to include patients whose socioeconomic status puts them at risk for poor health or by reimbursing community health workers, patient navigators, case managers, and other lay health care workers for a well-defined set of activities with documented health benefits. In doing so, Medicaid could scale up nonclinical services and health care workforces that have been shown to achieve better health outcomes and increase health care provider productivity, at minimal cost or with cost savings. These more expansive health care delivery models are almost certain to prove the highest standard of care for chronic diseases, whether in Haiti or in the shadow of Harvard's teaching hospitals.

## REALIGNMENT IS WITHIN OUR GRASP

It is by no means a new discovery that poverty and poor health are linked, or that health resources are more likely to be used if they are offered conveniently to the recipients, or that a goal as complex and ambitious as "health" can be effectively pursued only with a multidisciplinary team of workers. The challenge is implementing these insights effectively and on a large enough scale to reap the synergies they promise.

But what's new is this: The US health care system has reached a tipping point. Reform is in the air across the sector, with primary care especially positioned for transformation. "Never let a good crisis go to waste," said Winston Churchill. The practices of countries that have improved health despite scarce resources are ready for adoption and adaptation. And the US health care ecosystem, including public, private, and philanthropic resources, is ripe to leverage this crisis to implement solutions that will improve it.

"Health" is a bold, expansive aspiration. Let's make sure that what we call "health care" is broad enough to get the job done. ■

### Notes

- 1 Data from this and the previous two sentences come from Meena Seshamani, "Escalating Healthcare Costs," Department of Health and Human Services, March 2009.
- 2 This estimate is based on a January 2012 Boston Foundation/Massachusetts Business Alliance for Education report.
- 3 "Recent Studies and Reports on Physician Shortage in the US," Center for Workforce Studies/Association of American Medical Colleges, August 2011.
- 4 National Association of Community Health Centers, "Access Denied: A Look at America's Medically Disenfranchised," March 2007.
- 5 John Cook, Deborah Frank, Carol Berkowitz, Maureen Black, et al., "Food Insecurity Is Associated with Adverse Health Outcomes Among Human Infants and Toddlers," *The Journal of Nutrition*, 134, 2004.
- 6 Deborah Frank, Nicole Neault, Anne Skalicky, John Cook, et al., "Heat or Eat: Low Income Home Energy Assistance Program and Nutritional Risks Among Children Less Than 3 Years of Age," *Pediatrics*, 118, 2006.
- 7 Margot Kushel, Reena Gupta, Lauren Gee, and Jennifer Haas, "Housing Instability and Food Insecurity as Barriers to Healthcare Among Low-Income Americans," *Journal of General Internal Medicine*, 21, 2006.
- 8 Arvin Garg, Arlene Butz, Paul Dworkin, Rooti Lewis, et al., "Screening for Basic Social Needs at a Medical Home for Low-Income Children," *Clinical Pediatrics*, 48, January 2009.
- 9 Arthur Kleinman, "Catastrophe and Caregiving: The Failure of Medicine as an Art," *The Lancet*, 371, Jan. 5, 2008.
- 10 Paul Farmer, Fernet Léandre, Joia Mukherjee, Marie Sidonise Claude, et al., "Community-Based Approaches to HIV Treatment in Resource-Poor Settings," *The Lancet*, 358, Aug. 4, 2001.
- 11 Paul Farmer, *Infections and Inequalities: The Modern Plagues*, Berkeley: University of California Press, 1999.
- 12 E. Lee Rosenthal, J. Nell Brownstein, Carl Rush, Gail Hirsch, et al., "Community Health Workers: Part of the Solution," *Health Affairs*, 29, July 2010.
- 13 Heidi Behforouz, Paul Farmer, & Joia Mukherjee, "From Directly Observed Therapy to Accompanateurs: Enhancing AIDS Treatment Outcomes in Haiti and in Boston," *Clinical Infectious Diseases*, 38, 2004.
- 14 Sarah McBride, "Venture Capital Cuts US Medical-therapies Support," Reuters, Oct. 6, 2011.
- 15 Leigh Page, "Private Equity Funds Are Changing the Face of U.S. Hospitals," *Becker's Hospital Review*, May 2, 2011.
- 16 "Use of Retail Medical Clinics Rises 10-Fold Over Two-Year Period," RAND Corporation, Nov. 22, 2011.
- 17 C. Jason Wang, Kathleen Conroy, & Barry Zuckerman, "Payment Reform for Safety-Net Institutions: Improving Quality and Outcomes," *The New England Journal of Medicine*, November 2009.
- 18 Timothy Williams, "Tackling Infant Mortality Rates Amongst Blacks," *The New York Times*, Oct. 14, 2011.
- 19 John Kiely and Michael Kogan, "Prenatal Care," *Reproductive Health of Women*, 2010.
- 20 "The Supplemental Appropriations Act, 2008 & Implementation of CMS 2237 IFC: Targeted Case Management," Deficit Reduction Act, United States Congress, July 30, 2008.