

DELIVERING HEALTH. CARE REDEFINED.

Innovations that Broaden Global Healthcare
Products, Providers, Places and Payment Solutions
will Enable the Comprehensive Preventive Care Model
Needed for 21st Century Health



In 2011, a group of social entrepreneurs who work on global health—all Skoll Award for Social Entrepreneurship winners—met at the Skoll World Forum on Social Entrepreneurship. This small group of leaders represented disruption: the innovative models they individually espoused and were scaling held powerful evidence for the potential of an expanded and more effective healthcare delivery system. What began as an informal meeting has grown into a collaboration that is developing a collective vision for improving healthcare delivery.

This document is the first step toward that collective vision. We present our view of needed transformations in the current health system; our framework for system change, rooted in our own experience and drawing on our growing evidence base; and our vision of components critical for future systems. *We invite practitioners, funders, academics and policymakers to join us.*



DISRUPTING THE DELIVERY STATUS QUO

Healthcare access and delivery is one of the most pressing issues we face today. Illness and poor health affects every person on the planet; quality and availability of care is paramount in the lives of our friends, our family and our communities. Within that experience, “healthcare” has become synonymous with treating disease, a sickcare system that includes hospitals, research institutions, pharmaceutical companies, insurance companies and governments around the world. Although low-income countries are still overwhelmed by lack of infrastructure and access to basic care while high-income countries often fight over who should get insurance and who pays for healthcare, the central issue is the same: *the global system we have today is not comprehensive enough to tackle 21st century health problems.*

Our work has demonstrated both on-the-ground and at-scale, in communities across the world, that broadening what it means to deliver quality healthcare can improve health outcomes while more efficiently leveraging our limited health resources.

We Are a Group of Health Leaders . . .

- We work in 50 countries around the world, many resource-poor and some resource-rich.
- We partner with communities, governments, aid agencies, NGOs, corporations, hospitals, academic institutions and pharmaceutical companies.
- We focus on a spectrum of issues connected to health: from vision care to mental health, equity to access, HIV/AIDS to cancer, transportation to the environment.

We identify as social entrepreneurs: change agents who have recognized in the current, unjust state of health-care delivery the opportunities to increase value for patients, communities and systems. Although entrepreneurship is often tied to technological advances or drug breakthroughs—the “silver bullets” of healthcare—we represent the infrastructure players who believe that the change we need will be grounded in delivery science rather than just medical science. Success is understood as keeping people and ecosystems healthy while building functioning and lasting systems. We seek to understand the root causes of a problem; our experience in addressing these drivers through our work has contributed to a growing evidence base that supports scalable solutions for healthcare delivery.

. . . Driven Toward a Common Goal

We envision a future where focus is shifted from healthcare to health, from a system centered on disease management to one rooted in prevention, community wellness, comprehensive treatment and resilience.

A system that focuses on health must transform traditional and limited definitions of what healthcare is and where, by whom, and how it is provided and paid for. This transformation—moving healthcare upstream to address the social and environmental conditions that are making people sick—will happen by:

- **Broadening the healthcare product** to move beyond scans and antibiotics to include interventions that address the social determinants of health, such as diet and living environment.
- **Broadening the health provider** to include lay health workers and nonmedical staff who partner with clinicians and bring new competencies in delivering that broader range of health products and promoting patient health.
- **Broadening the places** where health is provided to where people live, work and play.
- **Broadening the payment solutions** for health delivery to cover the range of products, personnel and services that enable a healthy life and can be accessed regardless of ability to pay.



A comprehensive system will encompass social and environmental conditions

THE PROBLEM: AN INCOMPLETE SICKCARE SYSTEM

It is undeniable that we have made progress on traditional indicators of global health: for the last 20 years, life expectancy has risen steadily, the under-five mortality rate has declined by 41 percent and maternal deaths have declined substantially. We have seen a decline in deaths from tuberculosis as well as AIDS-related causes and, between 2000 and 2011, the estimated number of measles deaths decreased by 71 percent as more countries achieved high levels of immunization coverage (WHO, 2013). If we claim that 20th century healthcare was about tackling infectious disease, as many do, then we have done a good job.

These statistics belie a stark reality: progress on reducing infectious disease is not equivalent to progress on health.

Social, environmental and behavioral conditions affect health, but solutions are not aligned:

We continue to lack the infrastructure (WHO, 2009) and human resources (Kinfu et al., 2009) needed to provide basic care to everyone. In countries at every stage of development, health and illness follow a social gradient: the lower the socioeconomic position, the worse the health (WHO, 2008). And we continue to fund interventions that address disease but not its root causes. The World Health Organization has created a commission to lead global action on the social determinants of health—the conditions in which people are born, grow, live, work and age—citing the key role these conditions play in people's health. Yet despite this attention, it is well documented that current medical care covers just an estimated 10 percent of the overall drivers of patient health, despite the substantial role that social, environmental and behavioral factors play (Shroeder, 2007; McGinnis 2002).

The characteristics of health are changing, the problems large in scale and the system strained and inequitable:

- **Chronic diseases are the leading cause of death worldwide.** Today, the top five causes of death globally are heart disease, stroke, lower respiratory infections, chronic obstructive lung disease and diarrhea, all of which are linked to environmental, social and behavioral factors. Together, they kill more than 36 million people each year,

80 percent occurring in low- and middle-income countries. These deaths are predicted to increase if current trends persist (WHO, 2013).

- **Climate chaos is threatening health.** Increasing climate chaos, including warming temperatures, extended droughts and sea level rise are seen as “the biggest global health threat of the 21st century” (Lancet, 2009) resulting in a range of health problems like heat stroke, increased asthma, heart disease and the spread of both waterborne and infectious diseases.
- **Healthcare spending is high, concentrated on the wealthiest countries.** Globally, \$6.5 trillion is spent on health every year, 84 percent of which is spent in OECD countries that contain 18 percent of the world's population (WHO 2013).
- **Healthcare spending does not mean people are healthier.** In 2012, \$3.4 billion was spent on health care for the 12.8 million people in the state of Illinois (Illinois Department of Human Services, 2012). In middle- to upper-income areas of Illinois, average life expectancy is 79 years, while the poorest neighborhoods have an average life expectancy of 69 years, 10 years fewer (Joint Center, 2012). By comparison, \$730 million was spent on healthcare for the 11.46 million people in Rwanda where the average life expectancy is 63 years (WHO, 2012).
- **Most current health outcome inequalities are due to lack of access.** Of those inequalities or differences in healthcare delivery within countries—namely lack of access to services, medicines, antenatal care and water and sanitation—about 75 percent are considered unfair and potentially avoidable with the right paths of action (CDC, 2013).

DRIVERS OF THE SYSTEM: LEVERS FOR CHANGE?

While we acknowledge that local context varies widely, we note five common challenges within the current paradigm that mark this complex healthcare delivery system.

Driver 1: Highly Specific Solutions

The system is largely based on research and treatment of isolated problems that yield targeted solutions. Patients—and their social, environmental and behavioral situations—do not exist in such a singular, linear way. There is nothing wrong with a system that focuses on medical specialization, of course; it is a critical part of healthcare. But to ground healthcare delivery within these narrow bounds produces disease care that targets individual symptoms rather than comprehensive patient care.

Driver 2: Misaligned Incentives

There are unrealized opportunities to increase outcomes and lower costs at every stage of the value chain in healthcare delivery. Misaligned incentives, limited financing mechanisms and lack of coordination drive current definitions of health and of care.

Driver 3: Cost Complexity

As we have shown, the global burden of disease has shifted from infectious disease to chronic disease.

We observe the tension, natural to a complex system, between funding community-level care and hospital-based, specialized care. In an age of rising chronicity, funding is pulled toward more expensive parts of the system, at a premium to the preventive care that may be better suited to address disease.

Driver 4: Two Systems, Two Realities, Similar Outcome

Despite truly extraordinary advances in medical science, many people still lack access to basic care. Infrastructure, basic medicines and sufficient medical providers remain scarce in places plagued by poverty. Wealthy populations receive the majority of healthcare spending. Yet, people are not necessarily healthier where the money is spent, they just receive more and better treatment.

Driver 5: Missing Social and Environmental Links

Despite increasing awareness of and focus on the social determinants of health, the global health community has not adequately embraced the environmental dimensions of health and disease. Increasing specialization in science, treatment and care has divorced healthcare from social and environmental realities that impact the health of the individual and the community.

THE DISRUPTIVE SOLUTION: 4 PS

We represent a vision of healthcare that directly addresses the needs of people and the social and environmental determinants of health. We have demonstrated proven solutions, successful partnership with system players, and impact on national and international policy. Although the landscape of health risks and the systems charged with providing care differ by nation, common problems have led to similar solutions. Specifically, these solutions broaden *conceptions of product, provider, place and payment* in quality healthcare delivery.¹

Within this framework we offer examples of our work, to illustrate our approach and share evidence of positive health outcomes. Although we highlight organizations primarily within one category to demonstrate the framework, most of our models include approaches that fall into two or more categories. Specifically, each model highlighted

here engages an alternative workforce. We recognize value in the interplay and note the significance of more comprehensive models in driving impact. We are interested in better understanding the effect on quality care delivery. More work can be done to identify and analyze these connections.

This framework expands what we mean by healthcare: not simply sick care but comprehensive, whole-person care. It expands what we mean by prevention: not simply identifying at-risk patients but addressing the underlying determinants of health for everyone. And, overall, it expands what we mean by healthcare delivery.

¹ The first version of this framework appeared in *Realigning Health With Care* (Farmer, Onie and Behforouz, Stanford Social Innovation Review, Summer 2012).

WHAT: TRANSFORMING THE HEALTHCARE PRODUCT

When we say “healthcare delivery,” what is being delivered? In high-income countries, we often mean medicine, diagnostic tests and hospital services. Yet in resource-poor countries healthcare 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 healthcare must mean more than medicine. These experiences are converging: what healthcare looks like globally is being radically transformed. By defining and replicating strategies for effective healthcare delivery, we can transform the healthcare product well beyond essential medicines and other clinical interventions and in doing so, improve health, increase value and decrease costs.

ASSOCIAÇÃO SAÚDE CRIANÇA (Brazil)

Healthcare product: Family Action Plan

THE CONTEXT:

Health shocks, negative and unexpected events that result from sickness and injuries, can have substantial and long-lasting consequences on household welfare and are linked to intergenerational transmission of poverty.

THE MODEL:

Pediatricians and social workers in participating public hospitals identify hospitalized children with chronic health conditions who live in poor urban neighborhoods. After a triage process that includes interviews at the family’s home, qualifying families are recommended for admission to Saúde Criança. Saúde Criança and the family together design a tailor-made action plan to address the health, socioeconomic and psychological needs of the entire household; highly trained volunteers serve as primary facilitators. This Family Action Plan contains monthly goals in five areas: health, housing, income generation, education



and citizenship. These are monitored carefully throughout the entire program, which, on average, lasts 24 months.

The Evidence:

- **Hospitalization rates (and costs) reduce dramatically.** A study showed that hospitalization duration fell on average by 90 percent, and children were 11 percent less likely to have required surgery or clinical treatment than children that did not receive Saúde Criança benefits.
- **Household income improves.** Beneficiaries’ incomes almost doubled, and nearly 12 percent of household members were more likely to be employed than control families.
- **Children attend school.** The percentage of previously sick children who were attending school rose from approximately 10 percent at the beginning of the program to almost 92 percent, three to five years after graduation from the program.
- **Housing improves.** Home ownership increased to 50% after graduation, from 25% on program entry.
- **Improved perception of well-being.** Fifty-six percent of families self-identified their well-being as “bad/very bad” upon entry; after graduating, 51.2 percent identified as “very good/good” while only 15 percent identified as “bad.”
- **Model is replicable.** To date, Saúde Criança has helped 22 civil society organizations replicate the holistic methodology in six states across Brazil. It has also been adopted as public policy in the state of Belo Horizonte.

HEALTH CARE WITHOUT HARM (Global)

Healthcare product: Comprehensive environmental health agenda

THE CONTEXT:

Environmental factors are a key driver in human health outcomes. The healthcare sector—charged with keeping people healthy—is a major polluter and contributor to the deterioration of environmental health conditions.

THE MODEL:

Health Care Without Harm is a global network that works on every continent with health professionals, hospitals, health systems, ministries of health, NGOs and international organizations. Health Care Without Harm advocates for a



healthy planet by mobilizing the health sector, comprising roughly 8 percent of global GDP, to weigh in on issues such as climate change, toxic chemicals and industrial agriculture. Health Care Without Harm works with the healthcare sector to reduce its own environmental footprint via a comprehensive environmental health agenda—a platform that includes clean and efficient energy use that reduces greenhouse gas emissions, substitution of harmful chemicals with safer alternatives, sourcing and serving healthy and sustainably grown food, provision of clean and accessible water, promotion of sustainable healthcare waste management, green hospital design and construction, environmentally preferable purchasing, and leadership to prioritize and promote environmental health.

The Evidence:

- **Virtual elimination of mercury.** Mercury, toxic when inhaled, absorbed or eaten, has been present in health care devices such as thermometers and blood pressure devices for over a century. Health Care Without Harm has led a successful 15-year campaign to virtually eliminate mercury-based devices worldwide by demonstrating the viability of the alternatives; encouraging the emergence of a digital thermometer market; bringing the science to decision makers; promoting national policy change; and partnering with the World Health Organization, ministries of health, and hospitals all over the world to achieve a mandate for a total phase out of these devices via the 2013 Minamata Convention on Mercury.

- **Phase-out of medical waste incineration, reduction of emissions.**

Medical waste incinerators were at one point the largest source of dioxin emissions in the United States. Through national advocacy and local implementation, Health Care Without Harm was able to reduce the number of medical waste incinerators from 4,500 to 60. Health Care Without Harm now works globally together with the World Health Organization, United Nations Development Programme and the health sector in multiple countries to foster safer alternatives to toxic medical waste incineration.

MEDICINES360 (United States)

Healthcare product: affordable, accessible pharmaceutical products for women

Preventing unwanted pregnancies could avert, each year, the loss of 4.5 million disability-adjusted lifeyears, when maternal illnesses are also taken into account (WHO, 2004). By pioneering a new model of pharmaceutical product development, marketing and delivery, Medicines360 produces widely available and affordable contraception for women. Medicines360 focuses on products instead of profits first, engineering low-cost models, harnessing pharmaceutical marketing prowess, and partnering with large distribution channels to ensure women can access the product.

GRAM VIKAS (India)

Healthcare product: village-based, 100 percent inclusive water and sanitation

Lack of access to safe drinking water is a major cause of ill health and productivity loss in impoverished rural communities. The Gram Vikas model, dubbed the Movement and Action Network for Transformation of Rural Areas, uses water and sanitation as an entry point to better overall health and well-being. Gram Vikas' work with villages is contingent upon agreement and participation of 100 percent of the families, enforced by villagers themselves, to ensure that benefits are shared equally among all, irrespective of sex, caste, creed or economic status. The model includes the construction and financing of good-quality toilets, constant piped water supply and bathing rooms (to ensure that people stop using common village ponds for bathing); the model also includes education on personal hygiene and environmental sanitation. The communities bear about 60 percent of the capital costs of sanitation and 25 percent of the costs of establishing the piped water system as well as providing materials and labor. All families are uniformly provided three taps—one each in the toilet, bathing room and kitchen. As of March 2013, over 3 million people across 1,196 villages in Orissa have achieved 100 percent coverage. Studies among these populations have shown an 85 percent reduction in the incidence of water-borne diseases.

WHO: TRANSFORMING HEALTHCARE PROVIDERS

With a global population expected to reach 9 billion, we need to rethink who delivers healthcare services. Community health workers are a critical component of sustainable and effective healthcare systems. Whether they are volunteer college students in the United States or paid motorcyclists who deliver medicine to remote villages in The Gambia, these workers extend care to the communities where people live, enable doctors and nurses to practice at the “top of their licenses,” and help address the root causes of many preventable chronic diseases. They link vulnerable populations to knowledge, resources and higher-level care.

It is noteworthy that each of our models makes use of alternative healthcare workers. A recent New England Journal of Medicine article (NEJM, September 5, 2013) proposed an organizing model for community healthcare workers, claiming that the large delta between the number of healthcare workers available and those employed was due in part to lack of standardization across health systems for the roles of healthcare workers, how to access them, how to integrate them and how to compensate them. The authors offered an organizing framework, placing United States-based healthcare workers into three categories: extensions of hospitals or clinic systems, community-based nonprofit organizations and management entities (meaning collectives of a type of worker). Our work confirms these models and adds one more: government/ministry of health extensions. Our experience demonstrates that alternative healthcare workers can be those whose primary function is not to deliver care per se but whose employment ultimately delivers healthier outcomes, such as hospital environmental liaisons, transportation workers and social service coordinators.

MOTHERS2MOTHERS (Africa)

Healthcare providers: mentor mothers

The Context:

Today, without treatment, 45 percent of babies born to HIV-positive mothers will become infected (approximately 260,000 infants/year, UNICEF, 2013) despite inexpensive and effective treatment available to reduce transmission to 2 percent (UNAIDS, 2012).

The Model:

mothers2mothers identifies, trains, empowers and pays HIV-positive mothers (Mentor Mothers) to work alongside doctors and nurses in understaffed health centers as members of the healthcare team. In one-on-one and group sessions, Mentor Mothers provide essential health



education and psychosocial support to other HIV-positive mothers on how to protect their babies from HIV infection and keep themselves and their families healthy. Mentor Mothers are tasked with helping women come to pre- and post-natal visits, disclose their status to family members, begin a health-sustaining drug regimen, deliver in a health care facility, and embrace good breastfeeding practices. mothers2mothers encourages women to use birth control and have their children immunized, and screens for TB, nutritional deficiencies and other conditions affecting women and children.

The Evidence:

- **With increased mentorship come increased positive outcomes.** A study showed that clients working with Mentor Mothers had increased rates of delivery in clinics, increased testing, increased uptake of infant antiretroviral prophylaxis, and increased rates of safe breastfeeding practices. And the more visits, the better the outcomes: women who attended mothers2mothers four or more times during their pregnancy were three times more likely to take ARVs than those who only attended once while pregnant.
- **The model is being replicated by health systems.** Ministries of Health in both Kenya and South Africa have adopted the model nationally, embracing mentor mothers as healthcare workers. In June 2011 UNAIDS launched the

Global Plan, setting forth a common vision, frame work and timeline for country-led movement towards elimination of HIV in children in the 22 highest burden countries and halving maternal mortality from HIV by 2015. Mentor mothers are featured as best practice, resulting in eight ministries of health seeking technical assistance from mothers2mothers for implementing mentor mother models.

BASICNEEDS

(Africa, China, India, Southeast Asia)

Healthcare providers: mental health community health workers

The Context:

Mental or brain disorders, including behavioral and substance abuse disorders, account for about 30 percent of total disability and 13 percent of the total burden of disease (WHO, 2013). Despite this need, a 2011 study estimated a shortage of 1.18 million mental health workers for all 144 countries of low and middle income (Lancet, 2011).

The Model:

The BasicNeeds Model for Mental Health and Development adopts a participatory, rights-based approach to mental health, which it delivers in five interwoven modules: capacity building, community mental health, livelihoods, research and collaboration. Rather than provide services directly, BasicNeeds builds the capacity of psychiatric clinicians from the public sector and health volunteers from the community to coordinate weekly or monthly mental health clinics in outpatient primary health centers and follow-up, community-based care in people's homes and neighborhoods. These community health workers are also charged with case-finding and clinical referrals, playing an active role in addressing stigma in communities from mental disorder.



The Evidence:

- **Trained workers help identification of mental illness.**

A study on the Nepal program showed that trained health workers were able to identify affected individuals and mobilize people with mental health problems to seek treatment. Of the patients registered with the program,

86 percent reported improvements in their condition (Raja et al., 2012).

- **Mental health improves.** Eighty-six percent of the more than 600,000 people with mental health problems reached by BasicNeeds were able to access treatment, of which 73 percent reported reduced symptoms.
- **Quality of life improves.** Eighty percent of people with mental health problems that participate in BasicNeeds programs are able to work or return to work, compared to 46 percent at baseline. A study in Kenya showing improvements in income generation, functioning and quality of life among persons with severe mental illness, underscored the role of trained community health workers in the model as well as the care provider responsible for identifying symptoms and making clinical referrals (Lund et al, 2013).

CIUDAD SALUDABLE (Peru, Brazil)

Healthcare providers: recyclers

Inadequate procedures for the collection, treatment and final disposal of solid waste result in the pollution of ground and drinking water, the contamination of food supplies, the spread of communicable diseases, and a marked deterioration in the quality of urban life, especially in highly populated, poor areas (Northridge et al., 2003). Ciudad Saludable trains and formalizes recyclers in more than 200 municipalities through recycling associations that increase income, connect workers to public and private waste systems, and reduce waste in their communities, ultimately improving public health. Ciudad Saludable has formalized 11,500 recyclers, 1,100 of whom are included in formal collection routes benefitting 9 million Peruvians. 150 private and public companies deliver their waste to these recycling associations. Ciudad Saludable was instrumental in the creation of the first law in Peru, as well as Latin America, to regulate the activities of waste recyclers and, as such, validate their work as part of public environmental and health policy.



WHERE: TRANSFORMING HEALTHCARE PLACE

Most care, in countries rich and poor, is delivered outside the formal health system—in homes and communities. Health providers can leverage local networks of care by integrating healthcare into patients' daily lives, locating health resources where (and when) patients are most likely and able to access them, and using widely available information and communication technologies to “import” needed medical skills where appropriate. 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 healthcare.

TOSTAN (Africa)

Healthcare place: villages

The Context:

The health of children and adults is generally at risk in rural communities in Africa because of limited access to health resources and care, low vaccination rates, and lack of awareness about hygiene and disease prevention. The practice of female genital cutting, more specifically, continues to affect at least 3 million girls annually in Africa despite the fact that it carries many health risks and is recognized internationally as a violation of human rights.

The Model:

Tostan's Community Empowerment Program begins when the organization is invited into a village, typically working with clusters of 40 villages at a time. Tostan assigns a facilitator who speaks the local language and is from the same ethnic group. The facilitator lives in the village for the entirety of Tostan's three-year program because the village is the center of all program activities and health



care delivery. The program consists of human rights-based education classes: community-led, adult and adolescent education that teaches critical thinking and problem solving on issues of democracy, human rights, health and hygiene, literacy, technology, financial and project management, and rural enterprises. The program draws on modern nonformal education techniques as well as traditional African oral traditions such as theater, storytelling, dance, artwork, song and debate, and is intended to simply provide information, allowing villagers to decide what to do with the information they receive. Communities also democratically select a community management committee, the majority of which are women, responsible for implementing a range of development projects including health awareness and resource delivery.

The Evidence:

- **Significant abandonment of female genital cutting.**

Over 7,000 communities from Djibouti, Guinea, Guinea-Bissau, Mali, Mauritania, Senegal, Somalia and The Gambia have publicly declared their decision to abandon both female genital cutting and child/forced marriage based on learning derived from the Community Empowerment Program. The program and its principles have been recognized as a model for ending female genital cutting by the governments of Senegal and The Gambia as well as 10 UN organizations.

- **Improved overall health and hygiene.** Communities prioritize health as a human right and take action to improve community hygiene and prevent diseases such as malaria. Community-led efforts in the area of maternal and child health have led to a rise in vaccination rates, an increase in attendance at prenatal and postnatal consultations, and a decline in children suffering from malnutrition.

VISIONSPRING

(India, Bangladesh, El Salvador)

Healthcare place: villages, vans and optical shops

The Context:

Far sightedness, termed presbyopia, affects an estimated 1.04 billion people globally, 517 million of whom have no eyeglasses or inadequate ones. Of these, 410 million cannot perform necessary tasks due to lack of sight. Vision

impairment from uncorrected presbyopia predominantly exists (94%) in the developing world (Holden et al, 2008).

The Model:

VisionSpring sells high-quality, low-cost eye-glasses in communities that have traditionally had no access to eye care and need them the most. VisionSpring employs several strategies to expand places where eyeglasses are sold. First, VisionSpring uses a hub-and-spoke approach using optical shops with an employed optometrist as the hub and vision entrepreneurs as the spokes conducting outreach in the communities surrounding the optical shops. Vision entrepreneurs are local people that VisionSpring has trained to conduct vision screenings and educate their communities about the importance of eye care and the benefits of corrected vision. Second, in India, regional VisionSpring vans and other cost effective methods enable robust eyeglasses coverage in proximity of the optical store. Finally, VisionSpring partners with other organizations that have distribution models in place, training additional entrepreneurs through other networks. The model ensures that care will also continue over time as patients require new prescriptions.



The Evidence:

- **The poor purchase glasses and sight is restored.**

VisionSpring has sold over 1.5 million pairs of eye glasses, proving a viable market at the base of the pyramid.

- **Productivity improves.** University of Michigan researchers have determined that every pair of eyeglasses represents a 35 percent increase in productivity and 20 percent increase in monthly income.

WORLD HEALTH PARTNERS (India)

Healthcare place: rural telemedicine franchises

Isolated rural communities in low-resource countries lack access to quality healthcare: medical resources are not conveniently available, existing supply chains can be inefficient and unreliable, costs remain high for products and services, and preventive care is not generally sought or incentivized. World Health Partners addresses immediate healthcare

needs by identifying individuals that are already providing care and are part of the local communities— both informal providers and formally qualified providers—to own and operate franchises. These rural franchises, a patient's first access point, are supported by a last-mile supply chain delivering quality generic medicines and products, and linked to a network of referral pharmacies, diagnostic centers and urban clinics. Using widely available mobile and internet resources, World Health Partners connects rural franchisees and patients to virtual central medical facilities that house panels of accredited physicians and specialists to conduct medical consultations. All partners within the network financially benefit from increased patient volume, incentivizing them to stay in the network and enabling World Health Partners to require promotion of historically less profitable preventive health services. Service and product scale allow for affordable prices to the end user, 51 percent of whom come from the two lowest economic quintiles. While remote consultation is far from ideal in providing health services, using established human resources in the community and basic technology can benefit those who would not otherwise get the care. World Health Partner's network, covering a population of 80 million people in two poor, rural states of India—and soon in western Kenya—has conducted over 106,000 tele-consultations and treated over 700,000 cases each of childhood diarrhea and pneumonia. The model also demonstrates that rural clients are accessing preventive care when options are provided close to home: providers have enabled close to 800,000 couple years of protection via family planning services.



HOW: TRANSFORMING HEALTHCARE PAYMENT

Healthcare cannot be broadened without adequate and aligned financing models. This will require innovation in both private and public systems, and at the community level, to ensure that people can exercise their right to healthcare regardless of ability to pay. Care accessed by the poor should not mean poor quality care; healthcare financing, including delivery, needs to be realigned to support the best outcomes at all patient and population levels.

RIDERS FOR HEALTH (Africa)

Healthcare payment solution: managed transportation

The Context:

Roughly two-thirds of sub-Saharan Africa's 867 million people live in rural areas and, of those, between 40 and 60 percent live more than two kilometers from an all-season road (WHO, 2005). High costs of capital and premature deterioration of vehicles have led many governments to depend on vehicle donation rather than including transportation within government budgets. Additionally, where vehicles exist, they are frequently not well managed, maintenance not considered a regular part of healthcare delivery.

The Model:

Riders for Health (Riders) manages vehicles specifically used for healthcare delivery in conditions where there is no widespread network of vehicle-maintenance infrastructure. Riders works directly with ministries of health, devising costing models appropriate for the long-term management of assets. For example, a full-service lease model designed to ensure that an entire fleet of vehicles operates in optimum mechanical and economic condition throughout the life of the vehicle, used solely for health delivery purposes. Vehicles are owned by Riders and leased on a full-service basis to the government using cost-per-kilometer pricing, a methodology that covers cost of capital, fuel, replacement parts, technical and management staff costs, infrastructure costs,



and training. Riders charges the government periodically, based on usage, enabling reliable operational and financial management, the inclusion of driver and maintenance worker wages within health budgets, and an incentive for Riders workers to keep vehicles well-maintained and constantly ready for use.

The Evidence:

- **Transportation is accurately budgeted.** The Gambia, for example, now has the appropriate number of healthcare delivery vehicles for the size of its population and for the structure of its entire health system, ensuring that all 1.7 million people can be predictably, reliably and cost-efficiently reached.
- **Improved health systems.** In Lesotho, outreach health workers can conduct over three times more health education meetings each week after being mobilized on Riders-managed motorcycles. Since the introduction of Riders in The Gambia, no out reach clinic has been cancelled due to transport/fuel constraints; previously 32 percent were cancelled. In Zimbabwe, the average turnaround time from sample collection to health center receipt of laboratory-tested results has reduced from eight days to three.

HEALTH LEADS (United States)

Healthcare payment solution: integrating basic resource connections into the cost of care delivery

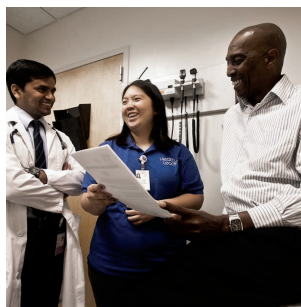
The Context:

In the United States, healthcare is defined by what is paid for by the healthcare system. In a 2011 study, 85% of physicians surveyed said that patients' social needs are as important to address as their medical conditions, and 76% wished the healthcare system would pay for costs associated with connecting patients to services that address their social needs (Robert Wood Johnson Foundation, 2011). Yet today, connecting patients to resources that address their social needs—access to healthy food, safe housing, or heat in the winter—is currently not addressed nor reimbursed as a standard part of quality care.

The Model:

In the clinics where Health Leads operates, physicians can systematically screen their patients for unmet social needs and prescribe, alongside medication, the basic resources

that their patients need to be healthy. Patients then take those prescriptions to the Health Leads' desk in the clinic waiting room, where a corps of highly-trained and competitively-selected college student advocates work side-by-side with the patients to access community resources and public benefits. The model, which utilizes a sophisticated technology platform that enables rigorous performance management and evaluation, also appropriates existing clinic infrastructure—the waiting room, the patient intake process, prescriptions and clinical referrals—and repurposes it to address patients' social needs. This clinical integration is coupled with financial integration—more than 75 percent of Health Leads' hospital partners pay for some or all of Health Leads' services.



The Evidence:

- **Clinical productivity increases.** A health center study confirmed that Health Leads increased the capacity of the pediatric social worker to provide reimbursable therapeutic services to children by 169 percent—improving the quality of care while generating additional revenue (George Washington University, 2011).
- **Revenue streams can expand.** Health Leads has assisted six partner institutions in applying for patient-centered medical home status, a US federal qualification, which enables those sites to earn a potential additional reimbursement of \$3-\$10 per patient per month based on application points awarded for referring patients to benefits.
- **Hospitals are integrating resource needs and paying for it.** Johns Hopkins Hospital in Maryland built social needs screening into its hospital-wide electronic medical record based on Health Leads' screening tool; Massachusetts General Hospital is paying for Health Leads' services and has launched an evaluation to assess impact of those services on patient satisfaction and physician retention.

These case studies highlight our organizations' engagements with health care product, provider, place and payment. Much of our work—individual, and collective—touches on two or more of this *what*, *who*, *where*, and *how* of delivery health care to the poor and vulnerable; the complexity of the undertaking, and the magnitude of the forces at work, necessitates it.

PARTNERS IN HEALTH

Partners In Health exemplifies this interplay. Partners In Health was founded in a squatter settlement in rural Haiti over twenty-five years ago, and has expanded since to work in ten countries around the globe, including the United States. Partners In Health's mission, and its "product" in the largest sense, is to create a preferential option for the poor in health care by drawing on the resources of leading medical and academic institutions and on the lived experience of poor communities. Partners In Health employs and trains lay health care workers and professionals, works both in communities and in more traditional care delivery settings, and does all of its work in partnership with public systems. Partners In Health's documented successes in treating HIV and TB in challenging settings have changed the global understanding of what is possible in delivery of health care to the poor, and continue to serve as a platform for advocacy and policy change. By integrating research, teaching, and service in partnership with universities and academic medical centers, Partners In Health tackles both diseases of poverty and their root causes, and strengthens the commitment and capacity of others who would do this work.



THE HEALTHCARE SYSTEM(S) OF THE FUTURE

Health and disease occur in social, behavioral and environmental contexts; solutions for keeping people healthy must be rooted in addressing these contexts. We have advocated for and given examples of broadening the practice of healthcare from today's disease management system to include the upstream forces making patients and communities sick as well as interventions that can make them well.

THE WAY FORWARD:

1. Invest in delivery science. Investments in infrastructure, in training and in people are effective. We need more proof showing the value of these investments and commitment to scaling what works.

2. Involve new players and transform traditional ones. College students can be health care advocates, HIV-positive mothers can be the link to more HIV-free babies, and imams can be the lynchpin for women's healthcare rights. Hospitals can be environmental leaders, motorcycles can be laboratory equipment and emergency rooms can be entrance rooms for social inclusion. Broadening our definitions will broaden our health outcomes.

3. Change the dialogue and widen the frame. Healthcare should be a cornerstone of social inclusion and creating healthy communities. It should not be a place of last resort for "sickcare." Healthcare systems and leaders must advocate for healthy people, healthy communities and a healthy environment. This will require that we break down silos that exist in policy and infrastructure that separate health from education, transportation, food production, housing, livelihoods and the environment.

JOIN US.

Practitioners: Partner and network with other social entrepreneurs building scalable models to impact health around the world. Document your work and study it rigorously so that it can be shared widely and scaled in partnership with others. We will continue to share best practices while we work together to address barriers to providing high-quality healthcare to all who need it. Please contact us to learn more.

Funders: Consider lengthening your commitments; measuring success in health outcomes rather than inputs; and investing in ground-up, scalable, community-based solutions in portfolios that address systems change.

Academics and researchers: Help us leverage our delivery work with research and teaching, creating an integrated feedback loop to improve our work, contribute to the evidence base, and train the next generation of global health implementers. Invest in delivery science. Help us disseminate new findings and best practices to all who could benefit from them. And help us expand the conception of "healthcare" to include the social determinants of disease and the structural forces which can render and keep people poor and ill.

Policymakers: Engage with us at all levels of government to broaden the healthcare discourse in order to broaden healthcare policy and practice. We need policies that address poverty, the environment and poor health in a mutually reinforcing framework that meets multiple Millennium Development Goals.

To share ideas and feedback, please email redefinehealthcare2014@gmail.com.



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