Health Leads

Background & Business Model Summary

Supplement to Health Leads' Social Impact Exchange online profile

History

Health Leads was founded in direct response to pressing unmet needs articulated by primary care physicians at Boston Medical Center in 1996. As a Harvard freshman, Health Leads Co-Founder and CEO Rebecca Onie read about Dr. Barry Zuckerman, Chair of Pediatrics at then-Boston City Hospital, who sought to create a pediatrics clinic where children actually get healthy by assembling a dream team of lawyers, psychologists, and literacy, violence, and child-development experts to address his low-income patients' needs. Dr. Zuckerman's vision resonated. Previously, Onie had interned in Greater Boston Legal Services' Housing Unit, advocating for families facing possible eviction and intolerable housing conditions and finding that these issues were often tied to health concerns: the asthmatic child who awoke nightly covered in cockroaches, or the client who could not afford both rent and HIV medication.

Onie spent six months interviewing physicians at Boston Medical Center, asking: "With unlimited resources, what would you give your patients?" Again and again, they answered: "Every day, I have patients with ear infections or asthma. I prescribe medication, but know they have no food or live in a car. I know these factors will have a more profound impact on my patients' health than anything I do in the doctor's office, but I don't ask about these issues because I have no idea what to do." Born of these conversations, and co-founded by Onie and Dr. Zuckerman, Health Leads is designed to address the pressing need articulated by these doctors: the absence of an affordable, scalable model for addressing patients' unmet resource needs. By enabling doctors and other providers to "prescribe" basic resources such as food and housing, and patients to "fill" those prescriptions with the assistance of Advocates (college student volunteers), Health Leads' model empowers healthcare providers to ask their patients previously "unaskable" questions and best leverages these professionals' scarce time.

Health Leads now operates in 21 pediatric and prenatal clinics, newborn nurseries, pediatric emergency rooms, and community health centers in six cities: Baltimore, Boston, Chicago, New York, Providence, and Washington, D.C. The organization has received extensive recognition, including praise from First Lady Michelle Obama, the Skoll Award for Social Entrepreneurship, a MacArthur "genius award" for Co-Founder and CEO Rebecca Onie, and profiles in numerous publications—including *The Washington Post, Forbes, The Atlantic*, and *TIME*. In August 2011, *The New York Times* wrote, "Five decades after the war on poverty, a work force that can systematically address the social causes of illness is still to be built."

Strategic Plan

Health Leads is midway through a four-year strategic plan that calls for significant growth. Between the start of FY13 and the end of FY14, Health Leads plans at least a 48% increase in desks and a 17% increase in regions, steered by a strategic plan explicitly aimed at implementing this expansion and preparing for future, more substantial growth.

The plan calls for opening three new desks in FY13 and five new desks in FY14 in current markets and launching one new region in FY14 featuring a minimum of two additional desks. In order to fund the startup and ongoing operations of these desks, Health Leads' funding model features a shared revenue structure of payment from clinics and contributions from members of the philanthropic community. In addition, to ensure sustainability of service for at least three years, Health Leads seeks multi-year and

annual commitments from funders. In total, the funding requirement to open these new desks and one new region to operate for at least three years is as shown below.

Health Leads also is supported by substantial in-kind contributions, including Advocates' time; the space, information technology, utilities, and clinical advisor time provided by hospital partners; and university faculty advisors' time. This leverage will grow as Health Leads expands and builds a growing cadre of physicians who donate their time to support Health Leads' work.

Each of Health Leads' current strategic goals is critical to the growth plan:

- **Increase the food, housing, and other basic resource connections Health Leads makes for patients with a scalable Health Leads model**; Health Leads projects an increase from 7,880 connections in FY12 to 15,500 in FY14.
- **Create a volunteer, alumni, and staff "leadership pipeline" to execute and champion Health Leads' new model of healthcare delivery** involves both inspiring Advocates to pursue related careers and cultivating alumni to serve as mentors for Advocates and champions of Health Leads.
- **Establish the business case for healthcare institutions to pay for patient resource connections.** Establishing a business case is key to the organization's funding model. Because quantifiable economic value is one of the more tangible keys to healthcare reform, Health Leads is undertaking evaluation of its influence on factors that affect institutions' bottom lines. Examples: Health Leads is studying the effects of its services on patient satisfaction and Emergency Room use by primary-care patients.
- **Make key capacity investments to prepare Health Leads for rapid future growth**, as well as positioning Health Leads to move from the "pilot" to the "flagship" phase of scale, starting in FY14, in order to yield faster, more effective, and more sustainable growth. Preparation for this phase includes creating a team dedicated to implementation of new-site launches, developing infrastructure to expand to new markets, standardizing the program model, developing an alumni engagement program, and upgrading technology.

	Payments from hospitals	Contributions from philanthropy	Total
3 New Desks – Starting FY13	$1.8M (3 yrs)	$0.9M (3 yrs)	$2.7M (3 yrs)
5 New Desks – Starting FY14	$3M (3 yrs)	$1.5M (3 yrs)	$4.5M (3 yrs)
1 New Region with at least 2 New Desks – Startup in FY13 and Launch in FY14	$1.2M (3 yrs)	$0.75M ($.15M for startup in FY13 plus.6M / 3 yrs)	$1.95M ($.15M for startup in FY13 plus 1.8M / 3 yrs)
TOTAL	$6M	$3.15M	$9.15M

In addition to providing service at these new desks, Health Leads will articulate an expanded growth strategy in its new strategic plan, now under development and scheduled to be implemented from FY15-FY18.

Program Model

Health Leads enables doctors to "prescribe" food, housing, or other critical resources, just as they would medication. Patients take their prescriptions to the clinic waiting room, where Advocates (college student volunteers), stationed at Health Leads Desks, work side by side with the patients to assist them in connecting with these resources.

Health Leads' straightforward, preventive referrals to key resources – food, childcare, employment, GED classes, job training, affordable housing and others – enable families to avert crises and increase their

income and educational attainment, two of the most critical determinants of better long-term health. Advocates assist families in negotiating the diverse, fragmented landscape of resources, providing eligibility criteria, hours of operation, languages spoken, and directions. Often Advocates' assistance is as straightforward, yet critical, as tracking down an agency phone number, bridging a language barrier, or searching through housing or job listings to find a match.

During designated follow-up shifts, Advocates reach out to clients weekly via phone, mail, or e-mail to ensure they obtain the resources they need and address any linguistic, bureaucratic, or logistical hurdles. This follow-up may occur over days or months, depending on the scope of the client's needs and the availability of the resources. Many clients express disbelief when they receive these calls, explaining that no one else has ever followed up. One client, a recent immigrant from Haiti, explained: "Now every little problem is just a little problem, whereas before, every little problem was a big problem. With you, things are so easy."

To this work, Health Leads' Advocates bring time, energy, and tenacity – the very assets that overwhelmed families most need and harried clinic staff often lack. As one pediatrician explained: "Health Leads is a part of our team. I can't do it all. The one social worker we have can't do it all. We're just barely staying above water. The Health Leads volunteers have excellent listening skills, aren't limited by time, realize this work is important, and are passionate about it."

Establishing Demand in the Need

As indicated in Health Leads' strategic goal of establishing a business case for healthcare partners to pay for patient resource connections, the organization has an imperative to tie patient resource connections to a dollar value. Data that show how resource connections influence health outcomes, clinical productivity, or insurer-claims data can yield compelling reasons to invest in resource-connection efforts. As providers, payors, and policymakers aggressively pursue care-delivery models that yield better health outcomes and lower costs, their discourse increasingly reflects the notion that community-based resource services could enhance health. Still, the sector has only seen hints that such steps hold quantifiable economic value, which is one of the tangible keys to reform.

Health Leads' ultimate aspiration is that Medicaid will recognize the health impact and economic value of connecting low-income patients to basic resources—and will reimburse healthcare providers directly for delivering these services or otherwise incentivize them to do so. In the shorter term, however, the organization has chosen to prioritize building partnerships with, and securing revenue from, the healthcare providers, with a goal that they will later partner with Health Leads in pursuing Medicaid funding for these kinds of services.

To build its business case, over the past year, Health Leads has identified 14 primary metrics that hold financial incentives for the healthcare industry and that Health Leads may be in a position to influence. For example, one early pilot study of Health Leads' impact at Boston's Dimock Center found that the capacity of the health center's licensed clinical social worker to provide patients with reimbursable therapeutic services increased by 169% after Health Leads was implemented. The organization's extensive research included over 40 interviews with executives at hospitals, health centers, Medicaid MCOs, federal and state agencies, and accreditation bodies. As noted above under Strategic Goals, Health Leads is now launching studies of its effect on two of those metrics: patient satisfaction and use of the Emergency Room by primary care patients.

While additional research findings will be available soon, as Onie first saw firsthand 16 years ago, there is no question that the need exists. Doctors generally do not address these basic resource needs, not only because they lack time during a 13-minute clinic visit, but also because they lack knowledge of the expansive, fast-changing resource landscape. Just as they would not prescribe medicine without

pharmacies, if they cannot treat a diagnosis of hunger, they do not ask families if they are running out of food. Yet a 2011 survey of 1,000 pediatricians and primary care physicians by the Robert Wood Johnson Foundation found that four out of five physicians think patients' unmet social needs lead to worse health outcomes and are as important to address as medical conditions, and three in four wish the healthcare system would pay for costs associated with connecting patients to services that address their resource needs[1].

Meanwhile, healthcare experts project a chronic workforce shortage, made dire by ever-rising costs, diminishing economic incentives for healthcare professionals, and 20 million more Americans poised to seek care. Health Leads. Nonetheless, the U.S. healthcare system does not address patients' unmet resource needs as an integral part of medical care. Physicians will not routinely screen for these needs when there is inadequate clinic infrastructure to address them. A study at Johns Hopkins found that 98% of pediatric residents recognized that addressing social issues at well-child visits can positively impact health, but only 18% routinely screened for housing needs[2]. Just as doctors would not prescribe medicine without pharmacies, they will not ask patients whether they run out of food if they cannot "treat" this need.

Findings on social determinants of health**:** The impact of the social determinants of health is well documented in the medical literature. For example:

- Children who experience "food insecurity"—limited supplies of healthful food—are 30% more likely to be hospitalized by age three[3].
- Young children whose families need but do not receive help paying their gas or electric bills are 30% more likely to be hospitalized[4].
- The U.S. spends more money per person on health than any other country, but our lives are shorter – by nearly four years – than expected based on health expenditures, according to The Robert Wood Johnson Foundation study *Overcoming Obstacles to Health*. The report also noted the "large body of evidence tell[ing] us that whether or not a person gets sick in the first place in most cases has little to do with seeing a doctor."
- Children receiving food stamps are 26% less likely to be food insecure than eligible children not receiving food stamps[5].
- By reducing food insecurity, SNAP decreases children's risk of 1) hospitalization, 2) poor health, 3) iron deficiency anemia, 4) cognitive development deficits, 5) behavioral and emotional problems[6].
- Not receiving food stamps in food insecure households increased children's odds of having fair or poor health by 152%[7].
- Housing insecurity has been found to be an important marker for food insecurity and to be associated with poor health, growth, and development in young children[8].

[1] Health Care's Blind Side: Rep. Robert Wood Johnson Foundation, Dec. 2011. Web. 10 Jan. 2012. <http://www.rwjf.org/files/research/RWJFPhysiciansSurveyExecutiveSummary.pdf>.
[2] Arvin Garg et al, "Screening for Basic Social Needs at a Medical Home for Low-Income Children," *Clinical Pediatrics,* Jan. 2009 48(1):32–36
[3] J. Cook et al, "Food Insecurity Is Associated With Adverse Health Outcomes Among Human Infants and Toddlers," *Journal of Nutrition,* 2004, 134, 1348–1432.
[4] D. Frank et al, "Heat or Eat: Low Income Home Energy Assistance Program and Nutritional Risk Among Children Under 3 Years Old," *Pediatrics*, 118, 2006
[5] Children's Sentinel Nutrition Assessment Program. Food Stamps as Medicine: A New Perspective on Children's Health. Children's Health Watch, Feb. 2007.
[6] Ibid
[7] Cook, John T., et. al. "Food Insecurity Is Associated with Adverse Health Outomes among Human Infants and Toddlers." Journal of Nutrition 132.6 (2004): 1432-438.
[8] Cutts, Diana B., et. al. "US Housing Insecurity and the Health of Very Young Children." American Journal of Public Health 101.8 (2011): 1508-514. Children's Health Watch. Children's Health Watch, Aug. 2011.

Combined with studies such as those listed above, poverty trends indicate a future sharp increase in poor health: From 2000 to 2010, 12.3 million more Americans have become poor, reaching the nation's history high of 46.2 million and meaning that 15 percent of the population lived below the federal poverty line by the end of the decade[9].

In the global context, the relationship between access to critical resources – such as food, sanitary housing, and medicine – and overall health is widely understood. The United Nations' World Food Programme, for example, operates on the principle that "[f]ood should always be part of treatment and care programmes; medicine alone is not enough." To this end, the Programme has developed infrastructure to provide nutritional supplements as a routine component of drug therapy for HIV/AIDS patients in Africa and Asia.

Scarceness of primary care physicians and social workers: Meanwhile, healthcare experts project a chronic workforce shortage, made dire by ever-rising costs, diminishing economic incentives for healthcare professionals, and 20 million more Americans poised to seek care. Over the past 50 years, the percentage of U.S. physicians working in primary care has dropped from half to less than one third--and is still declining. And more than 56 million Americans—greater than one-fifth of the U.S. population—already live in areas with too few primary care physicians, according to the National Association of Community Health Center. The American College of Physicians has predicted an "impending collapse of primary care medicine,"[10] and an analysis in the journal "Health Affairs"[11] predicted a shortfall of up to 44,000 primary care physicians by 2025 unless steps are taken to avert the crisis. At the top of that analysis' recommendations is implementation of the medical home, a care-coordination model that includes connections to community resources.

Exacerbating this situation is the scarceness of social workers in urban medical centers. From 1996 to 2000, the percentage of social workers based primarily in hospitals declined from 20.8 to 7.9. Those few clinic-based social workers are necessarily focused on child abuse, mental health issues, and complex medical diagnoses, and do not have the time to avert potential crises, such as families who live tripled-up in an apartment or who need childcare to get a job. In New York City, for example, in 2011, Bellevue Hospital's main pediatric clinic had 14 social workers for 61,185 patient visits, and NewYork-Presbyterian Hospital's Washington Heights Family Health Center had just two social workers for 15,433 pediatric visits. As a result, the mother whose heat has been cut off in the middle of winter or who cannot afford transportation to her child's next doctor appointment is often left to fend for herself.

These statistics are echoed by national data: even if all 24,750[12] of this country's licensed social workers served Medicaid patients exclusively (and many do not), there would be just one social worker for every 2,404 of these patients[13].

Growth Not Just for Growth's Sake

Health Leads' aim is not just to "grow for growth's sake." Health Leads has received hundreds of requests from hospitals and health centers around the nation for its services, but it has held back, deliberately taking the time to carefully position the organization to scale realistically and sustainably—and to develop the business-case evaluation aimed at swaying even the most bottom-line-oriented institutions.

[9] Berube, Alan, Elizabeth Kneebone, and Carey Nadeau. The Re-Emergence of Concentrated Poverty: Metropolitan Trends in the 2000s. Working paper. Brookings Institution, 3 Nov. 2011.

[10] "The Impending Collapse of Primary Care Medicine and Its Implications for the State of the Nation's Health Care: A Report from the American College of Physicians," 1 Jan 2006

[11] Colwill, Jack et.al., Health Affairs May 2008, vol. 27 no. 3w232-w241]

[12] http://www.bls.gov/oco/ocos060.htm "Occupational Outlook Handbook; Social Workers" Bureau of Labor Statistics, US department of Labor. 29 March 2012

[13] http://www.statehealthfacts.org/comparecat.jsp?cat=4 "Medicaid and CHIP." Statehealthfacts.org

Under the umbrella of Health Leads' strategic goals, examples of its preparation for rapid growth include capacity development such as:

- Identifying criteria for prospective hospital and health center partners—including a focus on institutions serving low-income families; the support of senior-level leadership; a multi-year financial commitment to Health Leads; the ability to integrate the Health Leads model into the specific departments Health Leads' desks serve and into the electronic medical record; proximity to college partners to provide student Advocates; and a financial commitment to pay for Health Leads' services.
- Further standardizing Advocate training throughout the organization, including creating an Advocate Handbook.
- Further upgrading technology: Health Leads' client database, Efforts to Outcomes, tracks all data from the time of the client intake to volunteers' weekly follow-up calls with their clients to check on progress toward successful need resolution. Health Leads has recently received two significant grants specifically intended to provide the organization with the resources to enhance both its client and resource databases.

Key Risks

Model Risks

Earned Revenue and Philanthropic Funding Constraints

Even if Health Leads can frame a compelling value proposition to hospitals and healthcare payors, the healthcare system will not necessarily choose to purchase Health Leads' services versus paying for "life-and-death" patient care. Similarly, the organization may not be able to grow its philanthropic support, due to foundation endowments and private wealth hit hard by the recession, too many charities competing for the same dollars, or for other reasons.

Difficulty Proving Health-Related Return on Investment

While the existing medical literature links access to basic resources – such as food or fuel assistance – with health outcomes and healthcare utilization, in general, there is no well-established methodology for measuring the cost savings of preventive healthcare interventions administered to mostly healthy patient populations. In particular, this population's relatively infrequent incidence of negative health events demands a large sample size. Randomized control trials have been cited as the gold standard for clinical evaluation and, more recently, for evaluating social innovations, but this methodology has been challenging to apply to preventive health interventions, requiring creativity in Health Leads' research design.

Implementation Risk

Program Refinement

Health Leads' plan contemplates significant program model enhancements, including efficiency gains due to improved technology and volunteer training and oversight. If the organization is unable to accomplish these improvements and scale the Health Leads desk model to serve all patients in need of services, its programs will continue to provide positive direct impact on clients and volunteers, but will not demonstrate an affordable, large-scale infrastructure solution for healthcare institutions.

External Risk

Uncertainty of Health Care Reform

While preventive medicine has been a core element of the longstanding healthcare reform rhetoric in this country, the status of that reform is deeply uncertain. Health Leads' model is on the cutting edge of this debate, and the sector may be slow to establish formal incentives or compensation for these types of interventions – especially those addressing issues as complex as

social determinants of health. Health Leads will need to track the evolution of the healthcare sector and course correct as necessary to achieve systemic impact.

Risk Mitigation

In FY12, Health Leads prioritized the building of a robust senior leadership team, including five national Vice Presidents and three local Executive Directors (see the Leadership Team attachment), all seasoned managers with a deep appetite to serve as enterprise leaders for Health Leads – not merely as superb role players. For example, Health Leads has hired senior staff with more than two decades of sales and development experience. This new Leadership Team has been focused on intensively assessing Health Leads' current operations and laying the groundwork for building a more scalable model: managing client volume, increasing resource connection rates, building sustainable local revenue, and launching the evaluation necessary to establish the economic value of our services.

To increase philanthropic support, each Health Leads region is recruiting local boards of community and business leaders, introducing a new leadership donor recognition program to its community, establishing a corporate partnership program, and pursuing foundation grant opportunities. The organization is also planning to initiate procurement of challenge match grants to attract multi-year gifts of $10,000 to $100,000 per year.

In addition, in FY12, Health Leads enhanced the efficacy of Health Leads' growing team of 60 staff and hundreds of volunteers – as well as preparedness for long-term growth – with technology advances including: (1) continued refinements to its client database system to collect increasingly sophisticated program performance data, to drive quality improvement of Health Leads' model and to demonstrate its impact, (2) a customer relationship management (CRM) system that is helping Health Leads better engage its volunteers, investors, and other key constituents, and (3) a redesigned, web-based intranet to facilitate knowledge management and best practice sharing.

Thought Leadership

Health Leads also serves as a thought partner in the healthcare sector, engaging thousands of stakeholders around its vision. Examples just from the past year include:

- Co-Founder and CEO Rebecca Onie was invited to be a featured speaker on opening night at TEDMED 2012. Her talk, which received a standing ovation, has been viewed more than 245,000 times on the TED website (http://tinyurl.com/bssbumc).
- Onie's article "Realigning Health with Care," co-authored by Paul Farmer and Heidi Behforouz, was the cover article in the Summer 2012 issue of the *Stanford Social Innovation Review* (http://tinyurl.com/cwpuk3s). In response,
    - (a) 40 healthcare leaders (including Massachusetts Secretary of Health and Human Services JudyAnn Bigby) met with Health Leads to discuss the article; and
    - (b) 50 policymakers, academics, and healthcare administrators attended a "Cambridge Conversation" hosted by Health Leads--one of an ongoing series sponsored by philanthropist Swanee Hunt.
- Health Leads led a U.S. Health and Human Services-sponsored webinar for 200 federally qualified community health centers.
- Health Leads led a Robert Wood Johnson Foundation webinar on doctors' engagement with patients' social needs; 400 of the 1,000 participants later requested information on Health Leads.
- At the annual conference of The Association for Community Health Improvement, Rebecca delivered a closing keynote speech to 300 hospital community benefits administrators.

Health Leads Logic Model

Key activities	Outputs	Short-term/ intermediate outcomes	Long-term vision
• Families seek medical care at one of Health Leads' clinical partner institutions. • Families complete pre-visit survey to screen for unmet resource needs. • Healthcare provider addresses basic resource needs and refers to Health Leads. • Patient brings referral "prescription" to Health Leads desk for assistance from Advocates in connecting to basic resources. • Health Leads Advocates follow up with clients. • Health Leads Advocates record key data and provide updates to healthcare provider.	To enable effective performance management and to build organizational capacity to make data-informed decisions, Health Leads has developed a set of regularly reviewed performance metrics. These include outputs of key activities, including, but not limited to: • Number of unique clients served; • Percent of clients solved at least one critical need; • Number of desks in operation; and • Number of advocates. Demographic and intake data is collected at the point of care and is self-reported by the client. Selected performance metrics are reviewed internally on a weekly, monthly and quarterly basis to assess program performance and inform program development.	Health Leads has identified 14 metrics that tie directly to economic value for healthcare partners. Health Leads intends to measure short-term & intermediate outcomes to understand its services' impact on key stakeholders, including patients, providers, and Advocates. For example, Health Leads is working with clinic colleagues to evaluate impact on provider productivity (such as ER utilization rates and no-show rates), and on patient health outcomes, including patient satisfaction and Emergency Room use by primary care patients. Health Leads will continue to review opportunities to measure additional outcomes as its number of desks, provider partners and regions increase. Long term, Health Leads aspires to measure health outcomes over time using longitudinal studies across multiple patient populations.	**Vision** Health Leads envisions a healthcare system that addresses all patients' basic resource needs as a standard part of quality care. **Mission** Health Leads' mission is to catalyze this health care system by connecting patients with the basic resources they need to be healthy, and in doing so, build leaders with the conviction and ability to champion quality care for all patients.