Reducing Health Disparities in Underserved Populations Through IT Social Impact Investment

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Conflict of Interest

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Has no real or apparent conflicts of interest to report.
Agenda

• Health disparities in minority and other underserved populations
  – Current Landscape
  – Relevance and Impacts

• Using Social Impact Investment in concert with IT to reduce health disparities in underserved populations
  – What is Social Impact Investment (SII)?
    • What are Social Impact Bonds (SIBs)?
  – What current social impact initiatives are underway?
  – How can SIBs and other Social Impact Investments linked with IT strategies help reduce health disparities?
  – How effective can SII and SIBs be in addressing health disparities?

• Potential Projects and Case Studies
  – Best practices
  – Potential health disparities to address
  – Additional considerations

• Discussion and Q & A
Learning Objectives

• Review the current U.S. landscape of the health disparities in minority and other underserved populations.
• Explain how IT initiatives, social media technology, and social impact financing offer the potential for breakthroughs in reducing these longstanding health disparities.
• Describe the motivations, opportunities, challenges, and solutions for each of the key stakeholders in this new model, including investors, government agencies, HIT industry, healthcare providers, and underserved populations.
• Describe ways for attendees to frame projects utilizing models and techniques available in their own environments.
NHIT Collaborative
A Public/Private Partnership for a Healthier America

• National Health IT Collaborative for the Underserved (NHIT Collaborative) is a public/private community partnership that was launched in 2008 with support from HIMSS, the Department of Health and Human Services (HHS), Office of Minority Health (OMH), with funding from the National Institute of Health (NIH), National Institute on Minority Health and Health Disparities (NIHMD), over 100 organizations and individuals.

• Mission:
Contribute to the elimination of health disparities and the attainment of optimal health through the effective use of HIT for the underserved, with emphasis on multicultural underserved communities, and those who care for them.

• Purpose:
  – Empower underserved consumers to use HIT for health self-management
  – Promote HIT adoption by providers in underserved communities
  – Foster creation of a HIT workforce
  – Educate and inform regarding HIT federal/state policies and their impacts
  – Propagate HIT best practices and solutions
Wall Street *Roundtable*: Innovation in Underserved Communities

- The National Health IT Collaborative for the Underserved (NHIT) in collaboration with the Office of the Chief Technology Officer at the US Department of Health & Human Services

**Roundtable Goals:**

- Identify investments and other requirements for an innovation community app challenge that will tap the creative ideas of entrepreneurs and consumers in poor, multicultural and other underserved communities.
- Ascertain interest and levels of commitment among participants to create an HIT Alliance that will provide ongoing guidance and support.
- HHS issued a blog: [Technology for the Underserved: Discussing Future Investments](#)
On April 22nd, 2015 the NHIT Collaborative briefed the White House on opportunities to advance health equity through health IT innovation and collaboration.

The briefing featured a panel discussion with Obama Administration officials including Julie Chavez Rodriguez, Deputy Director of Public Engagement and grand-daughter of Latino civil rights activist Cesar Chavez, as well as selected experts including Dr. DJ Patil, Deputy Chief Technology Officer for Data Policy and Chief Data Scientist in the Office of Science and Technology Policy. Dr. J. Nadine Gracia, Deputy Assistant Secretary for Minority Health and Director of the Office of Minority Health at HHS, provided opening remarks, focused on the opportunities for health equity that have persisted in the 30 years since Margaret Heckler’s landmark report on health disparities in underserved and minority communities.
NHIT Collaborative - Wall Street Summit

Leveraging Social Impact Investments

• NHIT Collaborative – Wall Street Summit
  • When: June 14, 2016
  • Where: New York City

• Visit NHITUnderserved.org to learn more about the Summit
  • @NHITUnderserved

Convening Partners

HIMSS
transforming health through IT™

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Health Disparities

Current Landscape

• According to the Health Resources and Services Administration, health disparities are defined as “population-specific differences in the presence of disease, health outcomes, or access to healthcare.”

  – Race
  – Ethnicity
  – Immigrant status
  – Disability
  – Sex or gender
  – Sexual orientation
  – Geography
  – Income
Health Disparities

Current Landscape

• According to a 2009 study by the Joint Center for Political and Economic Studies, eliminating health disparities for minorities would have reduced direct medical care expenditures by $229.4 billion and reduced indirect costs associated with illness and premature death by approximately $1 trillion during 2003–2006.

• [source](http://www.cdc.gov/mmwr/preview/mmwrhtml/su6203a2.htm?s_cid=su6203a2_w)
Obesity

- In 2011, 30.3% of census tracts did not have at least one healthier food retailer within the tract or within 1/2 mile of tract boundaries
- This represents 83.6 million persons (27% of the 2010 continental U.S. population)
- The most substantial disparities were associated with urbanization; persons in rural tracts were 4x as likely to lack access than persons in more urban tracts
Poverty

• The association between unemployment and poor physical and mental health is well established
• Unemployed persons tend to have higher annual illness rates, lack health insurance and access to health care, and have an increased risk for death
Health Disparities
Current Landscape

• The incident rate of cancer among African Americans is 10% higher than among whites
• African Americans and Latinos are also approximately twice as likely to develop diabetes as white people are
• For all cancers combined, cancer incidence rates were the highest overall in black men compared to any other racial or ethnic group
• African Americans are at an overall greater risk of conditions that lead to end-stage organ failure:
  – diabetes, chronic kidney disease, and cardiovascular disease
Cancer Moon Shots Program:
A global, goal-oriented effort
to reduce cancer mortality

THE UNIVERSITY OF TEXAS
MD Anderson Cancer Center
Making Cancer History®
Cancer Prevention and Control Platform

Executive Director: Joxel Garcia
Co-Directors: Ernest Hawk and Mark Moreno

- Up to 50% of cancers can be prevented

- Policy, education and evidence-based service delivery can make a measurable and lasting difference in the community, especially among the underserved
A Shared Vision
Vice President Joe Biden, White House Rose Garden, Oct. 21

“And I believe we need a moonshot in this country to cure cancer. It’s personal. But I know we can do this ... because there are so many breakthroughs ... we can make them real with an absolute national commitment to end cancer as we know it today. And I’m going to spend the next 15 months in this office pushing as hard as I can to accomplish this.

Democrats and Republicans ... share our passion – our passion to silence this deadly disease. If I could be anything, I would want it to be the President that ended cancer, because it’s possible.”
Social Impact Bonds

• How social impact bonds might further efforts to advance technologies in underserved populations
Our STEPS Areas of Focus

Projects Supporting Patient Engagement & Population Management and Savings
STEPS: Patient Engagement & Population Management

- Increase in availability and use of HIT across underserved populations
- Decrease in adverse events and underutilization of appropriate and necessary services
STEPS: Savings

Increase in efficient, timely, and effective use of services

Decrease in costly preventable adverse events or outcomes requiring higher level of care
Health Disparities in Minority and Other Underserved Populations

• How are health disparities defined?
  – Health disparities are the differences in health outcomes that are closely linked with social, economic, and environmental disadvantage.

• Why do we need to address health disparities?
  – Very high Disability Adjusted Life Years (DALY) burdens in underserved populations – higher death and disability rates
  – Unnecessary costs
  – Unequal access and quality of care across populations

Effects of disparities

Effect of Disparities

- Higher rates of health conditions and mortality
  - Cardiovascular
  - Diabetes
  - Childhood obesity
  - Asthma
  - HIV/AIDS
- Higher infant mortality rates
- Lower life expectancy rates

Current National Initiatives

• The *HHS – Action Plan to Reduce Racial and Ethnic Health Disparities* report discusses a comprehensive plan to address and eliminate health disparities among minorities. These include:
  – Prevention and wellness programs
  – Education to address cultural problems
  – Diversity in health care workforce
  – Initiatives to place more qualified health care workers in underserved areas
  – Initiatives to study health care disparities
Social Impact Investment–
A New Approach for Supporting Innovation in Health Care
What is Social Impact Investment?

- Social impact investment is investment activity that intends to generate positive social and financial returns utilizing new financial resources to solve societal problems.

- Types include:
  - Social Impact Bonds (SIBs)
  - Pay for success

- Additional SII Approach
  - Grant-to-Loans on Success
Factors Considered in Impact Investing

- Investment goals and risks.
- Investment criteria.
- Opportunities and limitations across asset classes.
- Analysis of existing portfolios.
- Investments that align with the organization’s mission.
- Asset classes with broad exposure.
- Opportunities within all asset classes.
- Goals, potential impacts, and outcomes (performance measures).
Is Social Impact Investment the same as a SIB?

• Social impact investment is investment activity that intends to generate positive social and financial returns utilizing new financial resources to solve societal problems.

• SIBs enable impact investors to support innovators and entrepreneurs from the public, nonprofit, and for-profit sectors to achieve greater access to capital to develop and create capabilities, products, and services to meet the needs of people and communities not adequately served by the existing marketplace.
What is Prize Authority?

- Competition in which a prize is offered to a winning participant(s) where success depends on meeting established criteria and the broader goal of stimulating innovation that advances the mission of the awarding party. The competition results in an award, of either monetary or non-monetary value, presented to the winner of a competition conducted in accordance with the Prize Authority.

- Prizes have recently re-emerged as a strategy for stimulating innovation.

- Strongly supported by the federal government as a method to mobilize strategies to resolve the issues.
  - E.g.: America COMPETES Act – Gives agencies a simple and clear legal path to make it easier for agencies to use prizes and challenges with robust incentives to spur innovation, solve tough problems, and advance their core missions.
  - Wall Street Journal: “These prizes have proliferated because they actually work.”
Prize Authority

• Pay only for success and establish an ambitious goal without having to predict which team or approach is most likely to succeed.

• Reach beyond the “usual suspects” to increase the number of solvers tackling a problem and to identify novel approaches, without bearing high levels of risk.

• Bring out-of-discipline perspectives to bear.

• Increase cost-effectiveness to maximize the return on taxpayer dollars
Grant-to-Loan

• Grants can be combined with loans to an organization to decrease risk and develop “investable” transactions.

• Grants can provide effective seed capital to unlock capital from later stage impact investors.
  – Grants need to be made with clear, prioritized objectives.
  – If grants are to seed later stage investment from impact investors, they should be structured with milestones and benchmarks identified as requirements from impact investors.
Social Impact Bonds (SIBs) Defined

- **Definition:** Investments made into companies, organizations, and funds with the intention to generate measurable social and environmental impact alongside a financial return.

- SIBs partner with the government, private, and non-profit sectors to deliver a measurable social benefit. SIBs represent a **WIN-WIN-WIN** by cutting costs, rewarding success, and ensuring performance and accountability.

Sources: What You Need to Know About Impact Investing, Global Impact Investing Network; Rockefeller Foundation, Our Work Social Impact Bonds
SIBs Defined - continued

• SIBs are not bonds but rather performance contracts between multiple entities, most often including the public sector, private sector investors, a nonprofit agency or agencies providing services, and an intermediary organization that manages the process.

• Investment vehicles, such as SIBs, are meant to be tools that align incentives for creating more efficient delivery of social services—the investment mechanism is built on producing public sector cost savings that are then used to pay investors a return on their capital investments.
How do SIBs work?

1. Remedial Programs
   - Government currently provides costly remedial programs for constituents

2. Government contracts with intermediary for delivery of preventive programs to improve constituents’ lives, reducing their demand for remedial programs

3. Investors provide up-front capital to intermediary to pay for preventive programs; investors are repaid their capital plus a return only if preventive programs meet predetermined performance targets

4. Intermediary raises capital from investors; selects and manages nonprofit direct service providers, retains evaluation adviser and selects independent assessor; and provides overall SIB project management

5. Preventive Programs
   - Service providers receive multiyear funding from intermediary to deliver evidence-based preventive programs to constituent treatment group

6. Evaluation adviser monitors ongoing progress of the preventive program, working with the intermediary and service providers to refine program based on interim results.

7. Independent assessor determines if predetermined performance targets are met; if targets are achieved, government repays investors with a return and pays a success bonus to intermediary and service providers

Sources: Laura Callanan, Jonathan Law, Lenny Mendonca, From potential to action: Bringing social impact bonds to the US, McKinsey & Company, May 2012

Advantages of SIBs?

**Community**: Allows communities an option to supplement limited resources for designing, implementing, or scaling of programs that address the needs of their population.

**Investors**: Depending on how successful the program is, realizes a financial and non-financial return on the investment.

**Government**: Addresses a policy priority and shift some risk to private investors. Even after repaying the investors, governments can achieve long-term savings.
Rationale for the Potential of SIBs in Health Care

The Affordable Care Act:
By requiring health insurers to spend more premium dollars on care and fewer on administration and profit, the act might encourage insurers to invest in programs that reduce health care costs and provide a return.

Emergence of a collaborative effort to foster the development of a high-functioning market that supports impact investing.

While this market is still relatively new, investors are overall optimistic about its development and expect increased scale and efficiency in the future.

Sources:
- What You Need to Know About Impact Investing, Global Impact Investing Network;
Current Application of SIBs

Reduction in Recidivism
• UK - Petersborough Prison
• Rikers Island
• Massachusetts Juvenile Justice

Improvement in Early Childhood Education
• United Way of Salt Lake City, UT

Increasing Access to Healthcare Services
• Fresno, CA - Asthma
• Washington, DC – Teen Pregnancy Prevention
• South Carolina – Infant Mortality
Considerations for a Successful SIB

Elements of the SIB must be clearly defined

• SIBs must address a pressing social need using an evidence-based provider.
• SIBs must achieve a positive return on investment for both government and investors.
• SIBs must be rigorously evaluated based on quality metrics and data.
• SIBs must improve the lives of individuals and communities and “do no harm” to the population being served.
**Potential Benefits of SIBs**

- SIB can capture benefits worth $19 million in present value, which is $24 million in undiscounted current value.
- Benefits are primarily due to reduced use of prisons and other elements of criminal justice system.

Present value of total benefits to society: $142 million

- $19 million (13%)
  - Benefits to taxpayers during life of 12-year SIB
- $17 million (12%)
  - Benefits to taxpayers after life of SIB
- $16 million (11%)
  - Benefits to participants (primarily increased earnings)
- $90 million (64%)
  - Benefits to other members of society (primarily averted victims of crime)

Potential Uses for Addressing Health Disparities

• Best Practices
  – The most effective efforts address multiple determinants of health. Eliminating health and health care disparities will require sustained efforts from both within and beyond the health care system given the broad range of social and environmental factors that contribute to them.

• Promising Intervention Strategies
  – Multifactorial interventions that address multiple levers of change.
  – Culturally tailored quality improvement
  – Nurse-led interventions within the context of wider system change.

Partnership Categories

Investors

Charitable foundations

Hospitals

Government agencies

Non-profits supporting patient safety efforts

The exact organization private or public for each category will vary based on the type of project or program, expertise needed for designing, implementing and tracking outcomes, and goals of the program.
Example Use Cases

• **Helping Health IT Infrastructure in Underserved Areas** - a need for improved collection of data that still depends on manual steps despite use of EHRs and more efficient data exchange for tracking quality and outcomes.

• **Patient Safety Partnerships** – use of data sharing & analysis to proactively discover safety concerns before adverse events occur, leading to timely mitigation and prevention.

• **Improving Cultural and Linguistic Communication** - increase access to translation services and improve the quality of the services to reflect differences in dialects and literacy levels through technology.

• **Supporting Medical Education & Care Management** – **Project ECHO™** (Extension for Community Healthcare Outcomes) - “a collaborative model of medical education and care management that empowers clinicians everywhere to provide better care to more people, right where they live.”
SIB Process

Government Agencies
NGOs, Foundations

Transaction Intermediary
Plans & Manages Transaction Commitments

Product Developer
e.g., IT and EHR experts, healthcare organizations, medical associations

Pay for Success Funder (PFS) –
Federal, State public programs, public & private payers

Impact PFS Funder
Federal, state and local health organizations; private payers

Investors
Foundations, private sector investors - investment banks, hedge funds, institutional investors, NGOs - for achieving the social good

Independent Performance Evaluators
e.g., non-government or private neutral organizations

Finance Ready Project
Technologies and programs for improving access and quality care for underserved populations

The use of Social Impact Bonds is a novel yet emerging approach in the healthcare sector for supporting innovative programs and technologies. Through public private partnerships an incentive is created for embracing innovation but, most important, ensuring that good effective ideas do not lose traction because of funding. The SIB model has the potential for:

- Helping development and spread of effective, efficient technologies among underserved populations
- Reducing costs related to preventable adverse events and prevention of or early identification of serious disease.

Overall, the SIB model of funding could be significant for achieving health equity across all populations.
Questions

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NHIT Collaborative - Wall Street Summit

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• When: June 14, 2016
• Where: New York City

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