Overview of Innovative Funding Mechanisms for Public Health
12th Annual Public Health Finance Roundtable, APHA Annual Meeting
In today’s increasingly complex world of rapid technology, regulatory, economic and social changes, Deloitte is passionate about helping our clients deliver on their public health missions.

This year, we have supported responses to Ebola and Zika, new strategies for disease prevention, the use of technology for surveillance and monitoring, design of behavior change communications, and provision of technical assistance to increase efficiencies within agencies.

Our team of policy, research, evaluation, clinical, strategy and other health-focused consultants are committed to bringing our experience to address key public health challenges.
Our Team Here Today

David Rabinowitz
Monica Barrett
Laura Snebold

Today’s Topics

1. A perspective on innovation
2. Emerging models offering opportunities for funding public health
3. Charting a path forward
The Times, They Are A’Changing...

<table>
<thead>
<tr>
<th></th>
<th>1980</th>
<th>Today</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NUMBER OF “SUPERPOWERS”</strong></td>
<td>2</td>
<td>1...or 5?</td>
</tr>
<tr>
<td><strong>U.S. HOUSEHOLDS WITH A COMPUTER</strong></td>
<td>&lt;0.1%</td>
<td>&gt;90%</td>
</tr>
<tr>
<td><strong>INTERNET HOSTS</strong></td>
<td>~100</td>
<td>~1,000,000,000</td>
</tr>
<tr>
<td><strong>GRAMS VS BYTES MOVED</strong></td>
<td>~100,000 to 1</td>
<td>~1 to 100,000</td>
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Transformation Powered by Exponential Growth in Data

$10^{26}$ = Computing power of all human brains

$10^{16}$ = Computing power of 1 human brain

$10^{16}$ = Computing power of a mouse brain
Emerging Enablers

**Crowdsourcing & Micro-work**
Communities external to an organization engaged to achieve a goal

**Gamification**
Game mechanics to incentivize behaviors

**DIY & the Maker Movement**
Creativity unlocked when the public has access to the tools needed to create products

**Success Funding**
New capital to fund the creation of a product, service or intervention

**Incentive Competitions**
Using prizes to garner a community to participate in solving a problem
Public Health Organizations at the Forefront of Opportunity

>50%  Local Health Departments collaborating with a non-profit hospital on a Community Health Needs Assessment

88%  State Health Departments collaborating with primary care providers to encourage use of evidence-based public health services

20%  Local Health Departments exploring participation in an Accountable Care Organization

9%  Local Health Departments actively engaged with State Innovation Models

Source: Findings from the 2015 Forces of Change Survey (NACCHO); 2015 Forces of Change Survey Report (ASTHO)
Social Impact Bonds offer an innovative tool that brings new capital to effective solutions and enables leaders to funnel taxpayer dollars to programs that have real, measurable impact.
Traditional Ways of Delivering Services

**Target Population**
Receives the services

**Payor**
Issues RFP and contract for services

**Contract**
Lists prescribed set of services and activities

**Service Providers**
Deliver prescribed sets of activities to population named in contract

**Target Population**
Receives the services
Challenges of Traditional Service Delivery

**Payor**
Issues RFP and contract for services

**Contract**
Lists prescribed set of services and activities

**Service Providers**
Deliver prescribed sets of activities to population named in contract

**Target Population**
Receives the services

- Fiscally constrained governments
- Difficult to shift money between programs
- Difficult to take a comprehensive approach
- Funds inputs not outcomes
- Bureaucratic controls
- Hard to know what is working
- Effective approaches rarely scale
Social Impact Bonds (SIBs)

- **Target Population** Benefits from the outcome
- **Payor** Identifies and pays for the outcome
- **External Organization** Achieves the outcome
- **Evaluator** If needed, determines if the outcome is achieved
- **Investors** If needed, provides working capital
- **Service Providers** If needed, delivers services to reach the outcome
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- **Investors** If needed, provides working capital
- **Evaluator** If needed, determines if the outcome is achieved
When are SIBs used?

- Outcome may generate government savings
- Outcomes are observable and measurable
- Evidence of effective interventions
- Few negative consequences if intervention is unsuccessful
- External organization able to significantly influence the outcome
Growing Across the Country

Deloitte Consulting LLP

Active Project
Planned Project
No Project
Central California Asthma Collective and Clinica Sierra Vista

<table>
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<tr>
<th>Situation</th>
<th>Fresno has the <strong>highest rate of child asthma</strong> (almost 20%) incurring medical costs of over $35 million per year in emergency room visits and hospitalizations alone</th>
</tr>
</thead>
</table>
| Service Provider Approach | • Engage families of 200 low-income children with asthma to provide **home care, education, and support** in reducing environmental triggers  
• Deploy **state-of-the-art in-home interventions** to reduce pollutions, such as cigarette smoke, dust mites, and indoor air contaminants |
| Desired Outcome | 30% reduction in **emergency room visits** and 50% reduction in **hospitalizations** from asthma-related medical incidents |

Source: Asthma management demonstration project in Fresno, CA paves way for Social Impact Bond.  
## Recidivism Reduction at Peterborough Prison

<table>
<thead>
<tr>
<th>Situation</th>
<th>Short sentence prisoners <strong>lack the support necessary</strong> to break the cycle of crime and disproportionally reoffend</th>
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</table>
| **Service Provider Approach** | • **Integrated service provision** by 6 organizations  
• Tailored services for **immediate needs** such as accommodation, medical services, family support, employment and trailing, benefits, and financial advice |
| **Desired Outcome** | **Fewer instances of re-incarceration** among released prisoners |
| **Impact** | • While the **reduction target was not met**, the results were strong enough for the government to adopt the approach elsewhere  
• Model now used by Peterborough prison for **female prisoners** and the Ministry of Justice has **announced roll out** of statutory support in England and Wales |

## Despite Early Progress, Implementation Challenges Persist

### May Not Work for Everything
- Measurability essential
- Risk with “critical” services
- Outcomes need to flow in sensible timeframe

### Inherently Complex
- Risk allocation, payment structure, and multi-year governmental commitments
- Monitoring and evaluation issues
- Many potential variants
- Limited investor liquidity

### Requires Political Courage
- Need to embrace private sector return
- Getting beyond government silos is not easy
- ‘Walk away’ risk hard to mitigate

### Innovative and New
- Few existing intermediaries
- Lack of technical expertise and evidence
- Need a critical mass
Why Do SIBs Matter?

- Scales innovation
- Achieves outcomes despite tight budgets
- Drives outcomes with data
- Frees actors from red tape
- Leverages external capital for experimentation
- Links evaluation to evidence through funding
Discussion

Which public health **issue areas** might benefit from a SIB?

What **role** might public health organizations play in advancing SIBs?

What **expertise, data, or other resources** might public health organizations offer?
Prize Competitions motivate people outside the funding organization to create the best potential solution for a reward.
Prize Competitions

Evaluator/Judge
Identifies judging criteria and selects winner(s)

Payor/Sponsor
Designs and administers the prize, including providing funding to the winning solver(s)

Can be outside experts or the payor/sponsor

Often government or philanthropy

Solvers
Tackle identified problem

Can be anyone including citizens, students, researchers, and government employees

Target population
Benefits from the outcome
Benefits of Prize Competitions

**Prizes pay only for successful outcomes:** Purse only awarded to teams who meet requirements

**Prizes provide significant financial leverage:** In aggregate, participants typically invest 10x the purse amount

**Prizes democratize innovation and encourage new thinkers and approaches:** Model activates the crowd for answers—the smartest people in the world don’t work for you!

**Purse is not the only reason teams compete:** Competitions provide an opportunity for more resources

**Prizes catalyze change:** Prizes help to burgeon new products and solutions
ANSARI XPRIZE

Financial leverage: $10M purse | teams spent > $100M

New thinkers: 26 teams from 7 nations

Prizes catalyze change: $115B commercial space industry (as of 2012)
A $10 MILLION COMPETITION TO BRING HEALTHCARE TO THE PALM OF YOUR HAND

Capable of capturing key health metrics such as blood pressure, respiratory rate, and temperature

Can accurately diagnose 16 health conditions including, AFib, COPD, Diabetes, Hepatitis A, Pneumonia, Sleep Apnea, Stroke, Tuberculosis, Urinary Tract Infection
USAID Zika Grand Challenge

$30M program

Generate new solutions for prevention, detection, and response to emerging infectious disease outbreaks

900 submissions, 21 solutions selected for funding

Photo credit: Marvin Recino/AFP
Discussion

What public health **issue areas** could benefit from a prize competition?

What **role** might public health organizations play in designing, launching, and supporting a prize?

What **support** might public health organizations need to successfully play a role in a prize competition?

How will you **take this forward**?
Thank you!

To continue the discussion, visit us at booth #1223 and contact drabinowitz@deloitte.com