Health Impact Bonds®

Sustainable Investment in Health

Health and Housing Funders’ Forum • April 17, 2013
Health Impact Bond®

Raise capital to address the underlying social and environmental causes of disease, in exchange for a share of future health care cost savings (*shared savings model*)

- Developed by Collective Health in 2011 with support from The California Endowment and UC Berkeley
- First-ever HIB to launch in Fresno – focus on *asthma*
- Pursuing asthma bonds in additional markets and expansion to other diseases
Health Impact Bond®
How It Works

1. Where are the hot spots – and who is paying?

- Financial stakeholders
  - Public/private insurers
  - Employers
  - HC providers

- Share-of-savings contract

- Investors
  - Foundations
  - Individuals
  - Institutions

- Capital to pay for intervention

- Track record of results

2. What is the investment and risk/return?

3. What intervention and providers are evidence-based?

- Independent evaluators
  - Insurance/financial actuary

- Validation of savings

4. Can the savings be validated and shared?

- Better health, lower costs

- Service providers
Asthma in Fresno: A Crisis for Children and Community

20.2% children 5-17 diagnosed with asthma*

Every day, 20 go to the ER and 3 hospitalized for asthma

$34.8M per year for asthma-related ER and hospitalizations

* significantly higher for some race/ethnicity and socioeconomic groups
Asthma Control: Home-Based Multi-Trigger, Multicomponent Environmental Interventions

Economic Review
Cost-benefit studies show return of $5.3 to $14.0 for each $1 invested.  
www.thecommunityguide.org/asthma/multicomponent.html

Twelve-month data show a significant decrease in any (≥1) asthma ED visits (68%) and hospitalizations (84.8%).

http://pediatrics.aappublications.org/content/129/3/465.abstract
Fresno Project Components

1 Target Population & Savings Analysis

- Medi-Cal plans
- Self-insured employers

- Lower ED (30%) & hospital (50%)
- Save $7,773 per person per year

2 Funding & Investment

- Phase I: 200 individuals
- Phase II: 3,500 individuals

3 Intervention Design & Implementation

4 Savings Methodology & Validation

Actuarial-based savings methodology using insurance claims data:
- Randomized control study
- Baseline/lookback period
- Trend analysis post-intervention

Validation: third-party actuary
Fresno: Reducing Asthma Emergencies
Projections – 1,100 children

1 **identify** opportunity
   • Reduce ED visits (30%) and hospital stays (50%)
     ▪ Medi-Cal health plans
     ▪ Self-funded employers

$8.5M savings opportunity

2 **invest** in prevention
   • Bond investors provide upfront capital
   • Agreed interest rate and payback period

$3M upfront investment

3 **improve** outcomes
   • Evidence-based intervention by qualified service providers

Home-based multi-trigger, multi-component asthma intervention

4 **return** on investment
   • Payers share validated savings

$3M principal + interest repaid to bond investors
Intermediary/infrastructure costs
Most of savings is retained/re-invested by financial stakeholders (plus ongoing savings after first year)

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Fresno: Reducing Asthma Emergencies

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3. Return on investment
   - Payers share validated savings return on investment

4. Reduce ED visits (30%) and hospital stays (50%)
   - Medi-Cal health plans
   - Self-funded employers

Emergency and Hospital Costs

Pre-intervention: $16,371
Post-intervention: $8,598
Savings: $7,773

Program Investment and Infrastructure

$2,728

Net Savings
$5,045

Net ROI 1.8

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