Addressing Upstream Causes of Poor Health

*Impact-Investing for Better Health & Financial Outcomes*

Health Policy Institute of Ohio • December 5, 2013
Agenda

• what really matters to health?

• how can we invest in what really matters to health?

• a couple of examples

• let’s talk about Ohio
What matters to health?
What matters to health?

Access to high-quality, affordable health care
What matters to health?

Access to high-quality, affordable health care = 10%
What matters to health?

Social and Community Networks

Community Conditions

Living and Working Conditions

Lifestyle Factors

Health Care

Genetics

General Socioeconomic, Cultural and Environmental Conditions

Social cohesion

Safety

Transportation

Education

Food systems

Policies

Market dynamics

Employment and economic opportunity

Water, sanitation, air quality

Neighborhood design and built environment

Housing

Medical home

Mental health

Physical health

Participation

Work environment

Health Care

Genetics

What matters to health?
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education

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community

A $10 per person annual investment in community-based prevention over five years could produce 5% reductions in type 2 diabetes, high blood pressure, heart and kidney disease, and stroke — with ROI of $5.60 for every dollar invested.

healthyamericans.org/reports/prevention08/
What matters to health?

**socioeconomics**
- housing
- transportation
- food access
- sense of control

**relationships**
- The influence of relationships on the risk of death are comparable with well-established risk factors such as smoking and alcohol consumption, and exceed the influence of risk factors such as physical inactivity and obesity.
  

**education**
- College graduates live 5 years longer than those who don’t complete high school. If all Americans had the same good health as college grads, we’d avoid $1 trillion of costs annually.


**work environment**
- built environment
- natural environment
- public safety
- economic development

**community**
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**health-in-all policies**
- child development
- local jobs & training
- active participation
What the return on $2.9 trillion?

Health Determinants

Health Context & Behaviors (90%)

Health Care (10%)


invest?
What the return on $2.9 trillion?

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Health Context & Behaviors (90%)

Health Care (10%)

Health Spending

Prevention (3%)

Health Care (97%)


What the return on $2.9 trillion?

Health Determinants

Health Context & Behaviors (90%)

Health Care (10%)

Health Spending

Prevention (3%)

Health Outcomes (↑ better, ↓ worse)

→ Late Stage Interventions

↓ Infant Mortality
↓ Life Expectancy at Birth
↓ Diabetes
↓ Obesity
↓ Heart Disease
↓ COPD
↓ Disability

Health Care (97%)


What drives health care spending?

$2.9 trillion

Focus on **symptoms**, not **causes**

Pay for **treatment**, not **prevention**

Operate in **silos**, not **integrated teams**

Create **temporary fixes**, not **sustainable** impact

↓ **health**   ↑ **illness**   ↑ **costs**
What drives health care spending?

- $2.9 trillion
- Focus on symptoms, not causes
- Pay for treatment, not prevention
- Operate in silos, not integrated teams
- Create temporary fixes, not sustainable impact
- a vicious cycle

greater need

↑ health \(\downarrow\) illness \(\uparrow\) costs

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How would we invest in health?

1. Identify
2. Invest
3. Improve
4. Return

A virtuous cycle!
Health-impact investing: how it works

1. What are the causes of poor health – and who is paying?

2. What is the required investment and risk/return?

3. What initiatives and service providers are evidence-based?

4. Can the savings be validated, shared and reinvested?

ongoing learning • iterative/adaptive • sustainable reinvestment
Health-impact investing: what’s required

1. **Known causes** of significant and costly health issues that can be prevented or improved

2. **Evidence-based interventions** and service providers with demonstrated results

3. **Net savings potential and method** for measuring/validating actual cost savings (e.g., RCT using insurance claims data)

4. **Payers** that agree to share/reinvest savings:
   - Government health plans & commercial insurers
   - Self-insured employers
   - Providers with aligned incentives (Accountable Care Organizations, Patient-Centered Medical Homes, capitated)

5. **ROI/IRR**: acceptable investor risk-return and payback period
Health-impact investing: potential applications

• Preventable/manageable chronic disease (heart disease, asthma, COPD, diabetes)
• “Superusers” of emergency department/hospital readmissions
• Mental illness (especially with comorbidity)
• Addiction/recovery
• Preventive oral health
• Onsite/location-based clinics and telehealth
• At-risk maternity/prenatal care, and early childhood development
a simple example
(with a few complicated charts)
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
Asthma Impact Model for Fresno (AIM4Fresno)

1. identify

Value: reduce ER 30% & inpatient 50%

Potential: 16,000 children with poorly controlled asthma covered by Medi-Cal

Target top 10%: $8 million net savings
Asthma Impact Model for Fresno (AIM4Fresno)

1 identify

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Potential: 16,000 children (3-19) covered by Medi-Cal had an ER or urgent care visit for asthma in past 12 months

Target top 10%: 1,600 x $5,000 = $8 million net savings

Value of reducing emergency room (ER) by 30% and inpatient hospital by 50%

Per Person Per Year

Emergency and Hospital Costs
Pre-intervention: $16,371
Post-intervention: $8,598
Savings: $7,773

Program Investment and Infrastructure
$2,728

Net Savings
Net ROI
$5,045
1.8

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# Asthma Impact Model for Fresno (AIM4Fresno)

## 1. Identify

**Value:** reduce ER 30% & inpatient 50%

**Potential:** 16,000 children with poorly controlled asthma covered by Medi-Cal

**Target top 10%:** $8 million net savings

## 2. Invest

**Phase I:** 200 children → *current demonstration project is grant-funded*

**Phase II:** scale-up TBD → *health-impact investment*
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1. **Identify**

   **Value:** reduce ER 30% & inpatient 50%

   **Potential:** 16,000 children with poorly controlled asthma covered by Medi-Cal

   Target top 10%: $8 million net savings

2. **Invest**

   **Phase I:** 200 children
   - *current demonstration project is grant-funded*

   **Phase II:** scale-up TBD
   - *health-impact investment*

3. **Improve**

   - CCAC
   - Central California Asthma Collaborative
   - Clinica Sierra Vista
   - Ramp
Asthma Impact Model for Fresno (AIM4Fresno)

1. **identify**
   - **Value**: reduce ER 30% & inpatient 50%
   - **Potential**: 16,000 children with poorly controlled asthma covered by Medi-Cal
     - CalViva
     - Anthem
   - **Target top 10%**: $8 million net savings

2. **invest**
   - **Phase I**: 200 children
     - current demonstration project is grant-funded
   - **Phase II**: scale-up TBD
     - health-impact investment

3. **improve**
   - **Project lead & evaluation**: RCT using insurance claims data
   - **Validation**: third-party health insurance actuary
     - actual savings achieved

4. **return**
   - **Figure 4. Preventing asthma: projected savings.**
   - **Value**: reduce ER 30% & inpatient 50%
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this is really important to investors!
a bigger example
Health-impact investing at the community-level

• Five places. Five metrics. Five years.
• Population ≤100,000
• Invest in system-wide efforts to generate sustainable health and financial impact

More to be announced…

HICCup.co
and finally...
What are the opportunities for health-impact investing in Ohio?
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