Great Lakes Regional Summit for Sustainable Funding of In-Home Asthma Interventions

Ruth Ann Norton

June 9th, 2016
GHHI - A Model That Benefits Families

- Learning Network & Collaborative
- Single Intake System
- Comprehensive Assessment
- Coordinated Services
- Integrated Interventions
- Cross-Trained Workers
- Shared Data

Root cause remediation for:
- Indoor air quality
- Pest Management
- Mold/mildew/moisture
- Other environmental health triggers

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## Healthy Homes Demonstration Project

### Mean Change & Percent Reduction of Key Outcomes

200 units completed with 139 respondents completing 6 month post intervention health surveys

<table>
<thead>
<tr>
<th>In the past 6 months (N=139)</th>
<th>Intake Mean (StdDev)</th>
<th>6 Month Mean (StdDev)</th>
<th>Pre Post Mean Change (StdDev)</th>
<th>One-sided t test</th>
<th>Percent Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitalizations</td>
<td>0.364288 (0.923013)</td>
<td>0.141791 (0.53667)</td>
<td>0.238806 (0.824248)</td>
<td>0.0008</td>
<td>65.5%</td>
</tr>
<tr>
<td>ER Visits</td>
<td>0.942857 (1.22193)</td>
<td>0.701493 (1.097022)</td>
<td>0.261194 (1.250137)</td>
<td>0.015</td>
<td>27.7%</td>
</tr>
<tr>
<td>Physician Visits</td>
<td>1.76258 (1.462491)</td>
<td>1.340909 (1.413293)</td>
<td>0.389313 (1.460098)</td>
<td>0.002</td>
<td>22%</td>
</tr>
<tr>
<td>Calls to Physicians</td>
<td>2 (1.498792)</td>
<td>1.481203 (1.490381)</td>
<td>0.515152 (1.565296)</td>
<td>0.0002</td>
<td>26%</td>
</tr>
<tr>
<td>Work days missed</td>
<td>2.76259 (1.954492)</td>
<td>1.736842 (1.85413)</td>
<td>1.037879 (2.057959)</td>
<td>0.0000</td>
<td>37%</td>
</tr>
<tr>
<td>School/ daycare missed</td>
<td>2.372093 (2.008069)</td>
<td>1.787402 (2.091669)</td>
<td>0.647059 (1.998254)</td>
<td>0.0002</td>
<td>27%</td>
</tr>
</tbody>
</table>

*Environmental Justice, Vol 7. Number 6, 2014*
Reduced Costs = Cashable Savings

- 1 asthma-related hospitalization on average costs $7506 in Baltimore

- 1 asthma-related emergency room visit on average costs $820 in Baltimore

[Asthma hospitalizations and ED visits]

[2009-10 data]

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What is Pay For Success?

Pay for Success (PFS) models are cross-sector partnerships in which private investors pay upfront for a social service and then government or healthcare payors repay the investment if and only if agreed-upon outcomes are met.

If outcomes are not met, investors lose money.
What are the Benefits of Pay for Success?

**Payer**
- Realize cost savings
- No financial risk - only pay for what works
- Learn what programs are effective
- Bridge timing gap between services and cost savings

**Beneficiaries**
- Better outcomes with a broader reach
- Progress toward systemic change

**Service Providers**
- Obtain new flexible funding
- Build program capacity
- Scale services
- Grow evidence base
- Strengthen partnerships

**Investors**
- Catalyze and expand social impact
- Receive return on investment
The PFS Opportunity for Asthma

SOCIAL IMPACT

- 6.8M kids with asthma in U.S. (18.7M adults)
- 14M missed school days due to asthma
- 9M families living in unhealthy homes

CASHABLE SAVINGS

- $56B spent on asthma annually
- $5k - $15k per hospitalization
- $500 - $5K per ED visit
- Other Rx & urgent care costs

PROVEN INTERVENTION

- 40% of asthma episodes caused by home-based triggers

GHHI Healthy Homes Demonstration Project:

- 66% asthma hospitalizations
- 28% asthma ED visits
- 62% participants with 0 absences
- 88% participants with 0 missed work days

Sources:
- Center for Disease Control and Prevention (http://www.cdc.gov/nchs/fastats/asthma.htm)

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Collective Goal:
IMPROVE HEALTH AND SOCIAL OUTCOMES

1. Investment pays for cost of intervention
2. Draw down funds to pay for intervention
3. Home remediation and education
4. Evaluate outcomes
5. Validate savings and trigger success payments
6. Make success payments from cost savings
7. Repay principal and return

Flow of funds: Services & Evaluation

Asthma High Utilizers

& other investors

Philanthropic Guarantee

Robert Wood Johnson Foundation

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GHHI’s PFS work across the country
Leading 10 asthma-focused PFS feasibility studies with healthcare and service provider partners across the country.

Feasibility studies
- Bronx, NY
- Buffalo, NY
- Chicago, IL
- Grand Rapids, MI
- Houston, TX
- Memphis, TN
- Philadelphia, PA
- Rhode Island State
- Salt Lake City, UT
- Springfield, MA

Transaction structuring
- Baltimore, MD

Funders of asthma PFS feasibility studies:
Key Questions

• Is there a business case?
  o Financial model built off of evidence base of the intervention, actuarial projections

• Can Medicaid and their managed care organizations enter into these transactions?
  o New managed care regulations
  o Involving state Medicaid programs and federal CMS
Ruth Ann Norton
President & CEO
ranorton@ghhi.org
410-534-6477
@RuthAnnNorton

@HealthyHousing
GHHINational