



National Environmental Leadership Award *in Asthma Management*



Data to Dollars: 2015 Asthma Award Winners Share Their Stories



Welcome to the Webinar

2015 National Award Winners

Data to Dollars: 2015 Asthma Award Winners
Share Their Stories

Moderator:

- **Tracey Mitchell**, U.S. Environmental Protection Agency

Presenters:

- **Susan Steppe**, Le Bonheur Children's Hospital's CHAMP (Changing High-Risk Asthma in Memphis through Partnership) Program
- **Ruth Ann Norton**, Green & Healthy Homes Initiative (GHHI)



Introduction

Tracey Mitchell

U.S. Environmental Protection Agency

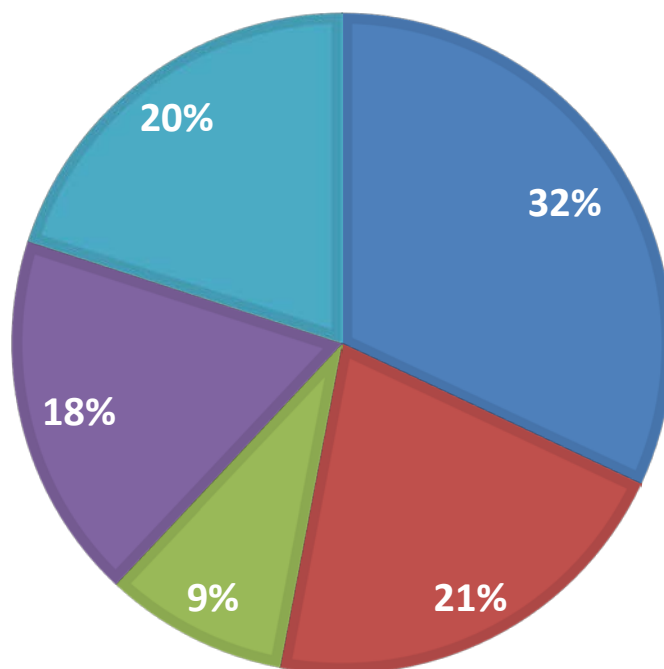
Purpose of Webinar

1. To develop a baseline understanding of program evaluation metrics, data tracking systems, and data analysis strategies.
2. Discover the ways in which data can be used to successfully attract new and different funding sources.
3. To learn how to package program data into a compelling story that demonstrates return on investment, sustainability and concrete evaluation measures for targeted funding audiences.

Polling Question 1

What type of organization do you represent?

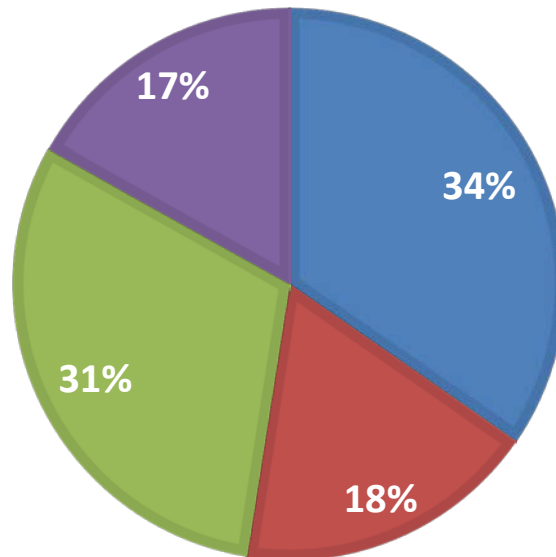
■ Government agency ■ Health care provider ■ Health plan ■ Community-based program ■ Other



Polling Question 2

What is your program's experience with seeking funding?

- Have successfully garnered funding in the past
- Currently seeking funding
- Plan to seek funding in the near future
- Do not plan to seek funding at this time



Agenda

1. EPA's National Environmental Leadership Award in Asthma Management
2. Hear From Speakers—
 - Susan Steppe, Le Bonheur Children's Hospital's CHAMP Program
 - Ruth Ann Norton, GHHI
3. Q&A Session in AsthmaCommunityNetwork.org Discussion Forum



Question & Answer Session on AsthmaCommunityNetwork.org Discussion Forum

Immediately after the webinar, join us in the [AsthmaCommunityNetwork.org Discussion Forum](#) for a live online Q&A Session from
3:00 p.m. to 3:30 p.m. EDT.

To post a question in the [Discussion Forum](#), follow these directions:

1. If you are a Network member, log in to your [AsthmaCommunityNetwork.org](#) account.

***Not a member?** Create an account at [AsthmaCommunityNetwork.org](#) by clicking the “[Join Now](#)” link at the top of the page. Your account will be approved momentarily and you can begin posting questions.*

2. Click on the “[Discussion Forum](#)” button on the home page.
3. Click on the “[Live Online Q&A for 5/27/15 Webinar](#)” link.
4. Click on the “[Post to the Forum](#)” link to post your question.
5. Enter your question and click the “[Save](#)” button at the bottom of the page.

About the Awards



1. It is the nation's highest honor for exceptional asthma management programs.
2. The goal of the Awards program is to showcase best practices in asthma care and management.
3. To be eligible, applicants must use: the National Institutes of Health (NIH) Expert Panel Report 3 (EPR-3): Guidelines for the Diagnosis and Management of Asthma.
4. Join the *Hall of Fame*: Apply in 2016!
www.asthmacommunitynetwork.org/awards

Award Winners Hall of Fame



Tufts Medical Center

multco.us
Multnomah County, Oregon

Michigan Department of Community Health

MDCH

Rick Snyder, Governor
Olga Dazzo, Director

Children's Hospital
Greenville Health System

Asthma Network
of West Michigan

PriorityHealth

SUHI
A proud member of Sinai Health System

South Bronx Asthma Partnership
S O B R A P
Helping the South Bronx breathe easy.

THE MONROE PLAN FOR MEDICAL CARE

L.A. Care
HEALTH PLAN®

L.A. Cares About **Asthma™**

IMPACT DC
Improving Pediatric Asthma Care in the District of Columbia

peach state health plan.

CENTENE
Corporation

nurtur
care to be different

mhs
MANAGED HEALTH SERVICES

Le Bonheur
Children's Hospital

Green & Healthy Homes Initiative®

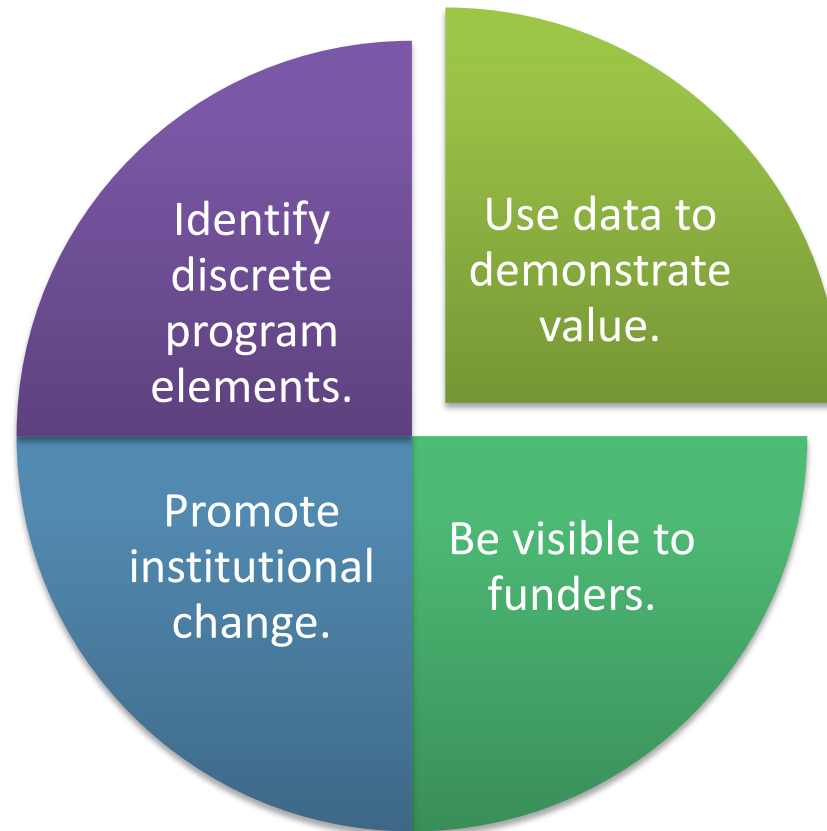
NEW YORK STATE Healthy Neighborhoods Program



The System for Delivering High-Quality Asthma Care



Sustaining the System



What is a Value Proposition?

“For \$400,000, we will improve asthma outcomes for 400 at-risk children with poorly controlled asthma by achieving reductions in emergency room (ER) visits and hospital admissions, through our in-home asthma case management program.

We estimate that our work will deliver \$640,000* per year in cost savings to the health care system through 40% fewer hospital admissions and 25% fewer ER visits.”

-Asthma Network of West Michigan

* \$1,600 savings per patient/year x 400 patients/year

Le Bonheur Children's Hospital

Susan Steppe, Project Director

Changing High-risk Asthma in Memphis through Partnership

The project described is supported by Grant Number 1C1CMS331046 from the U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services. The contents of this publication are solely the responsibility of the authors and do not necessarily represent the official views of the U.S. Department of Health and Human Services or any of its agencies. The research presented here was conducted by the awardee. Findings might or might not be consistent with or confirmed by the independent evaluation contractor.

CHAMP High-Risk Criteria

- Shelby County resident and TennCare recipient
 - Ages 2–18
 - Two or more of the following asthma-related events in a 1-year period—
 - Hospitalizations
 - Emergency department (ED) visits
 - Urgent care visits
 - Steroid bursts in event separate from above
- OR
- One or more intensive care unit admissions in the past 2 years



Components of the Program

“WHAT WE DO”

- Identify, **engage**, and enroll patients
- High-risk clinic: Medical evaluation and Plan of Care (POC)
- Home Visits by Community Health Workers (CHWs):
Environmental assessment, support asthma education,
meds reconciliation, social service needs
- Asthma Education by Certified Asthma Educator in the
clinic and in the field



Components of the Program

“WHAT WE DO”

(continued)

- Educating School Staff: Deliver POC and medication to schools
- Delivering to primary care
- Operating 24/7 call line answered by EMT and nursing staff, linked to on-call physician
- Ongoing case management
- Followup for sick calls, 24/7 call-in lines, and unplanned encounters
- Document activities in the CHAMP asthma registry

Sounds good, but . . .

- Does it work?
- Do children achieve better control over their asthma?
- How do we know if better control is achieved?
- How does “better control” translate into desired outcomes?

Outcome vs. Process

Outcome: The desired state or condition we wish to achieve

- What does success look like?

Process: The steps and activities you complete in order to achieve the outcome

Outcome vs. Process (continued)

1. Specific and measurable goals or aims

- *What is the story you want to tell? The story of a group of children experiencing significant improvement in the control of their asthma.*

2. Metrics—What does achievement look like?

- *Examples of measures: Children wheeze less, go to school more, and visit the ED and hospital less, with corresponding reduction in health care costs.*

3. Create a system to gather data on those measurements. Weave this process into daily life.



Outcome vs. Process (continued)

4. **Analyze that data** at regular intervals to see how you are doing. Get help if you don't have the expertise.
5. **Embrace the results and use the information.**
 - If negative, identify the problems and change your approach. This is an opportunity,
 - If positive, throw a party for the staff, then ask, "How could this be even better?"
 - Don't live in fear of your results.



CHAMP Registry

- Means to document all program activity
- Web-based and accessible in the field (i.e., iPads)
- Medical data imported from electronic medical records (EMR)—Not all of it
- Not an “add-on”—Integrated into the daily work flow
- Monthly download of TennCare data—Powerful case management tool with ability to analyze cost data
- Ability to generate reports on any elements within the system
- Evaluator on staff

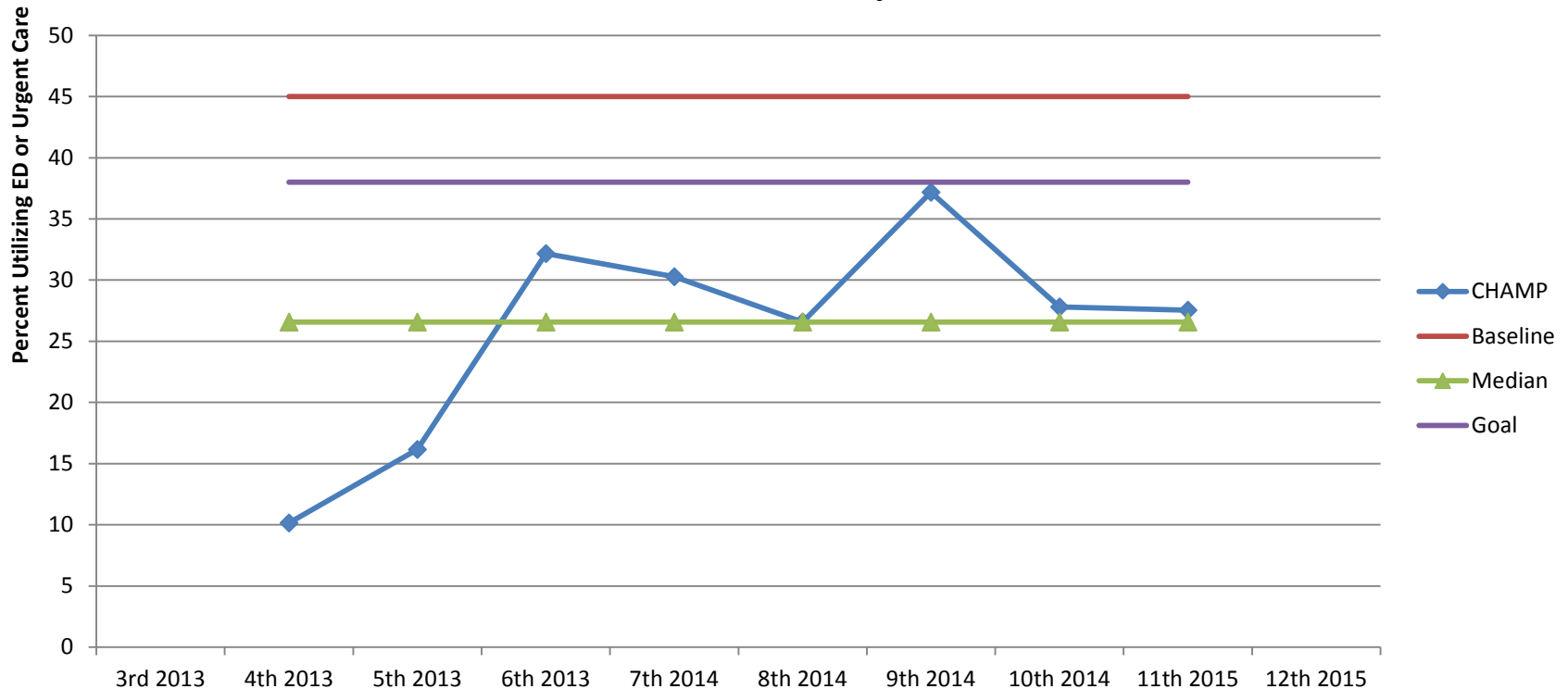
CHAMP Goals

1. Improve the health of children with high-risk asthma who are served by the program:
 - Reduce deaths from pediatric asthma to 0 by June 15, 2015.
 - Reduce ED and urgent care visits by 15% by June 30, 2015.
 - Reduce avoidable hospitalizations by 15% by June 30, 2015 .
 - Reduce asthma exacerbations or episodes by 15% by June 30, 2015.
2. Lower overall health care costs for children served by more than \$4 million by June 30, 2015.
3. Achieve an overall positive patient/family rating of the CHAMP program from at least 95% of the patients/families surveyed by June 30, 2015.
4. Improve the quality of life for 80% of the patients by June 30, 2015.



ED Utilization – 6 months

Asthma-Related Emergency Department and Urgent Care Visits in
Past 6 months
Percent of Participants



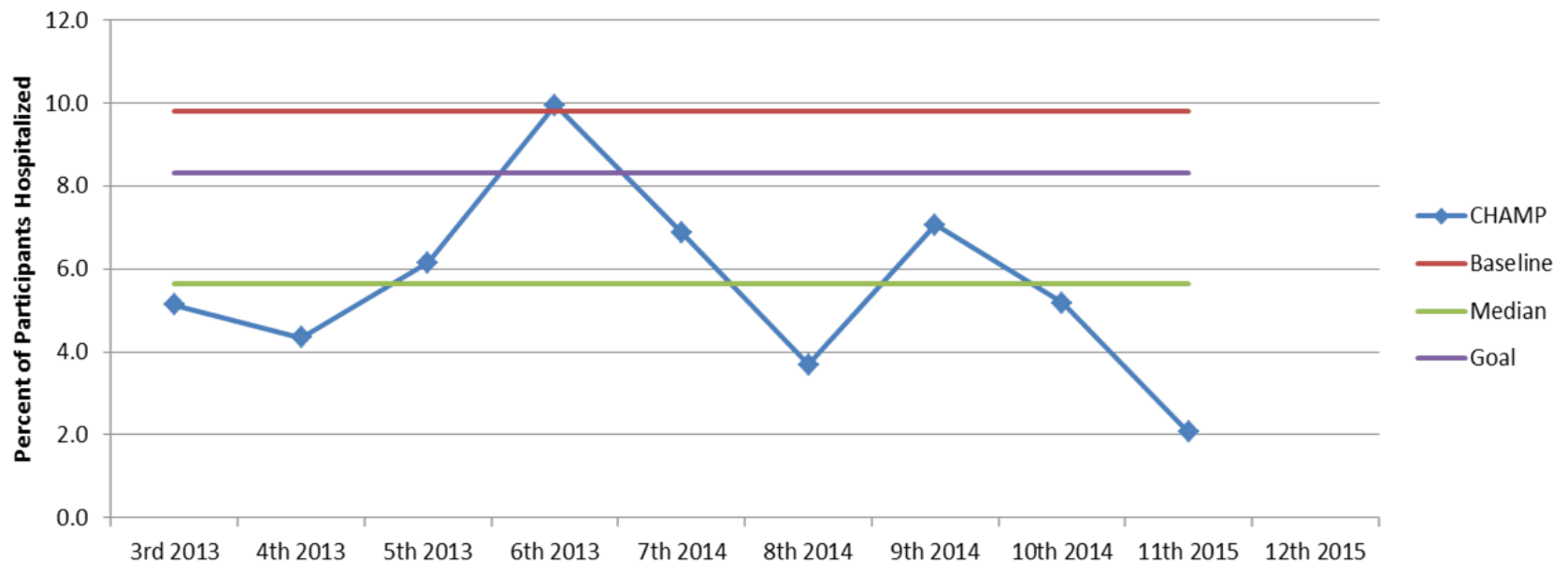
42% reduction in 6 month utilization over 9 quarters*

**The positive results cited are based on data from the awardee. Findings may or may not be consistent with or confirmed by the independent evaluation contractor.*



Hospitalizations/Observations

Asthma-Related Hospitalizations and Observations



43% reduction in the percentage of children hospitalized per quarter, over 9 quarters*

**The positive results cited are based on data from the awardee. Findings may or may not be consistent with or confirmed by the independent evaluation contractor.*



Cost Comparison

- Comparison of pre-CHAMP costs with “during CHAMP” costs indicates less money was spent on asthma care.
- In the last 3 quarters, there has been a 38.5% reduction in the average cost of care per child, per year—an imperfect method of calculation.
- National Opinion Research Center (NORC) at the University of Chicago, the external evaluator, is exploring the cost issue with a control group.



Essence of the CHAMP Story

- CHAMP appears to be successful in helping children in Memphis who are TennCare recipients control their asthma as evidenced by reduced ED and hospital visits.
- CHAMP shows promise (notice wording here) in helping these children stay healthier at a lower cost.



Things You Can Do When You Don't Have a Registry

- Set goals in specific and measureable terms. (What story do you want to tell? What does success look like?)
- Define how the goals will be measured. (What types of information will tell that story?)
- Establish the way that you can obtain information on those measures. Watch out for burdensome processes placed on front-line staff.
- Track the data collection process.
- Obtain technical assistance from a local expert (e.g., a university or local business volunteer) both to develop your metrics and to analyze the data.





More Things You Can Do When You Don't Have a Registry:

- Pull reports on at least a quarterly basis so you can see progress in achieving goals. Avoid the delusion of “Everything is going great!”
- Share data with the whole team and discuss what the data mean in terms of practice.
- Celebrate the good reports.
- Embrace the “not so good” data. Program strength comes from responding proactively to disappointing data. “What more can I do?”
- Admit problems and work them out. This shows great strength of character.





Data Arms You With Tools for Sustainability

- Reimbursement by private and Medicaid insurance payers.
 - Reimbursement may be available for services performed in the field (such as CHW visits and certified asthma education).
 - Meet with the Medicaid/insurance leaders early on. Share your goals and ask for collaboration. Update them at reasonable intervals.



Funding Strategies

- Social Impact Bonds (SIBs)
 - SIBs are a cutting-edge concept.
 - Private payers invest in health care programs that promise to improve population health at a lower cost.
 - This is not a simple process—but **IF YOU HAVE THE DATA** on your program outcomes, you can make a compelling case to participate in this type of venture.

Use Your Data

- To tell your story and show your progress in achieving goals
- To show your strategies for working through the obstacles to achieve goals
- To make a compelling case to a potential funder that you can help children control their asthma, stay healthier, and do so at a reduced cost

Questions?

Susan Steppe

Project Director, CHAMP Program

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901-287-5650

Follow us on Twitter: [@LeBonheurChild](#).

Like us on Facebook: [lebonheurchildrens](#).

Learn more on [YouTube](#).



Green & Healthy
Homes Initiative™

Green & Healthy Homes Initiative

Ruth Ann Norton, President and CEO

Green & Healthy Homes Initiative

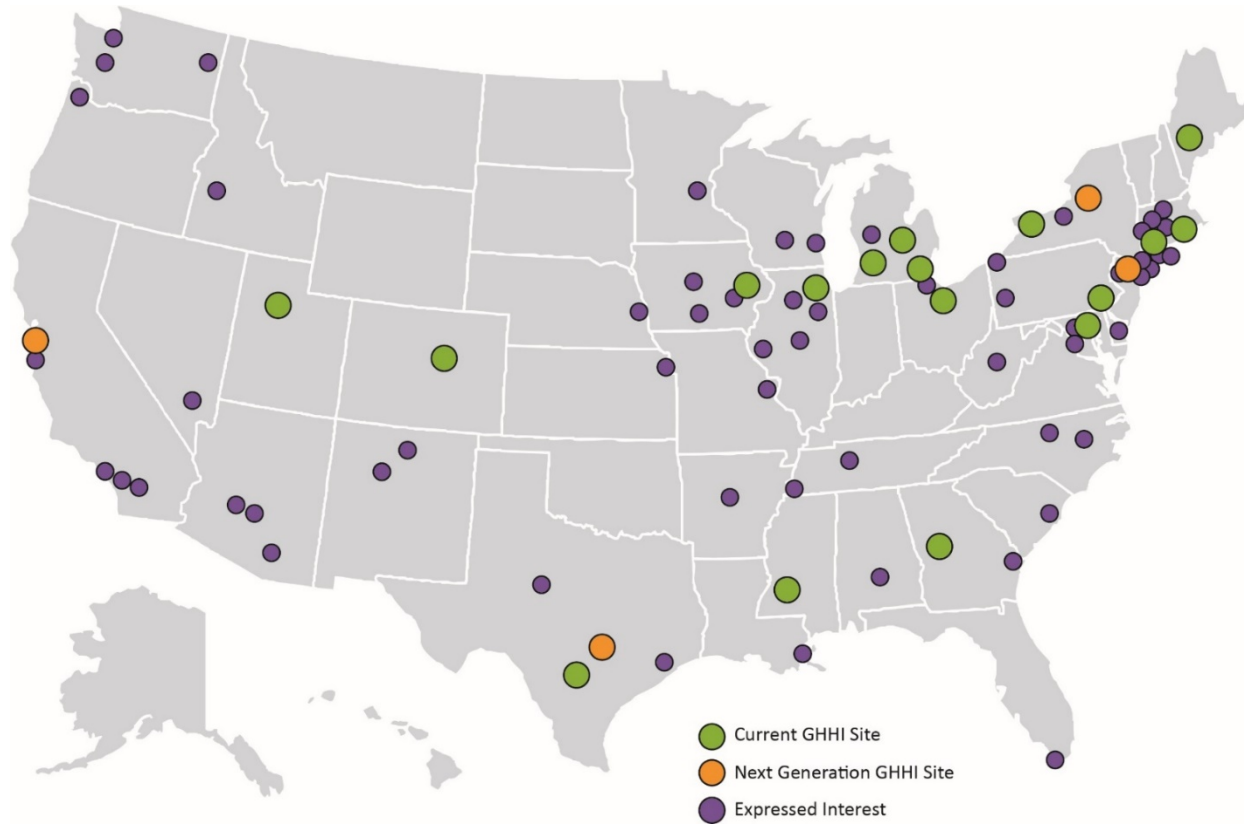
- GHHI is dedicated to breaking the link between unhealthy housing and unhealthy families.
- The GHHI model replaces stand-alone housing intervention programs with an integrated, whole-house approach that aligns resources, braids funding and coordinates partnerships to produce healthy, safe and energy-efficient homes.
- GHHI improves health, economic and social outcomes for low-income children, families and seniors.

Our Goals

- Optimally efficient and effective service delivery
- Evidenced-based practices and rigorous data collection to demonstrate improved outcomes
- Community-based workforce development
- Development of new funding sources to scale and sustain green, healthy and affordable housing
- Best-practice adoption for standards, policies and practices
- Medicaid payment for root-cause remediation

GHHI National Scaling

Using evidence-based practices and data to open new pathways for funding, bringing program to scale and changing policy

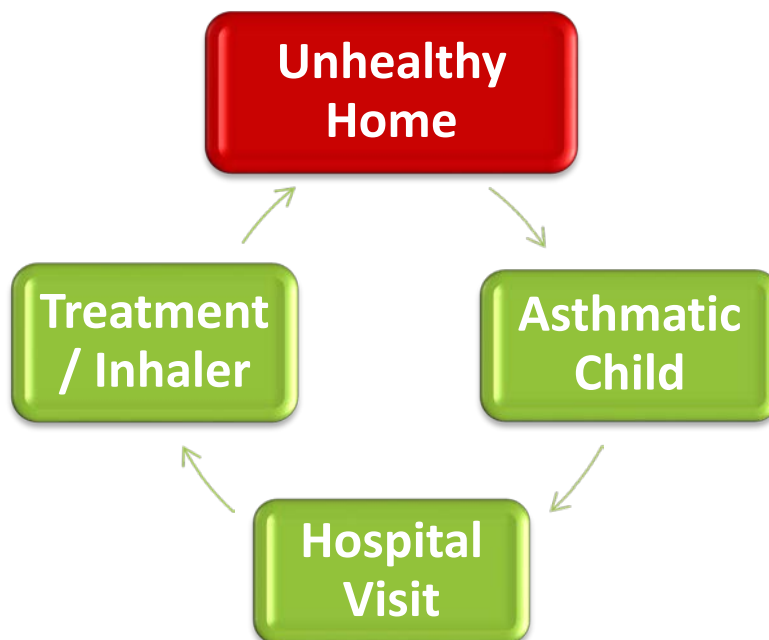


Collective Burden

- Nearly 9M families live in unhealthy homes
- \$51.1B in taxpayer dollars lost annually due to asthma-related illness
- 14.4 million missed school days due to asthma
- 14.2 million missed work days due to asthma
- 12.4 % of adults in Baltimore have asthma, vs. 8.6 % nationally
- 20% of children in Baltimore have asthma, vs. 9.4% nationally



Breaking the Link Between Unhealthy Housing and Children With Asthma



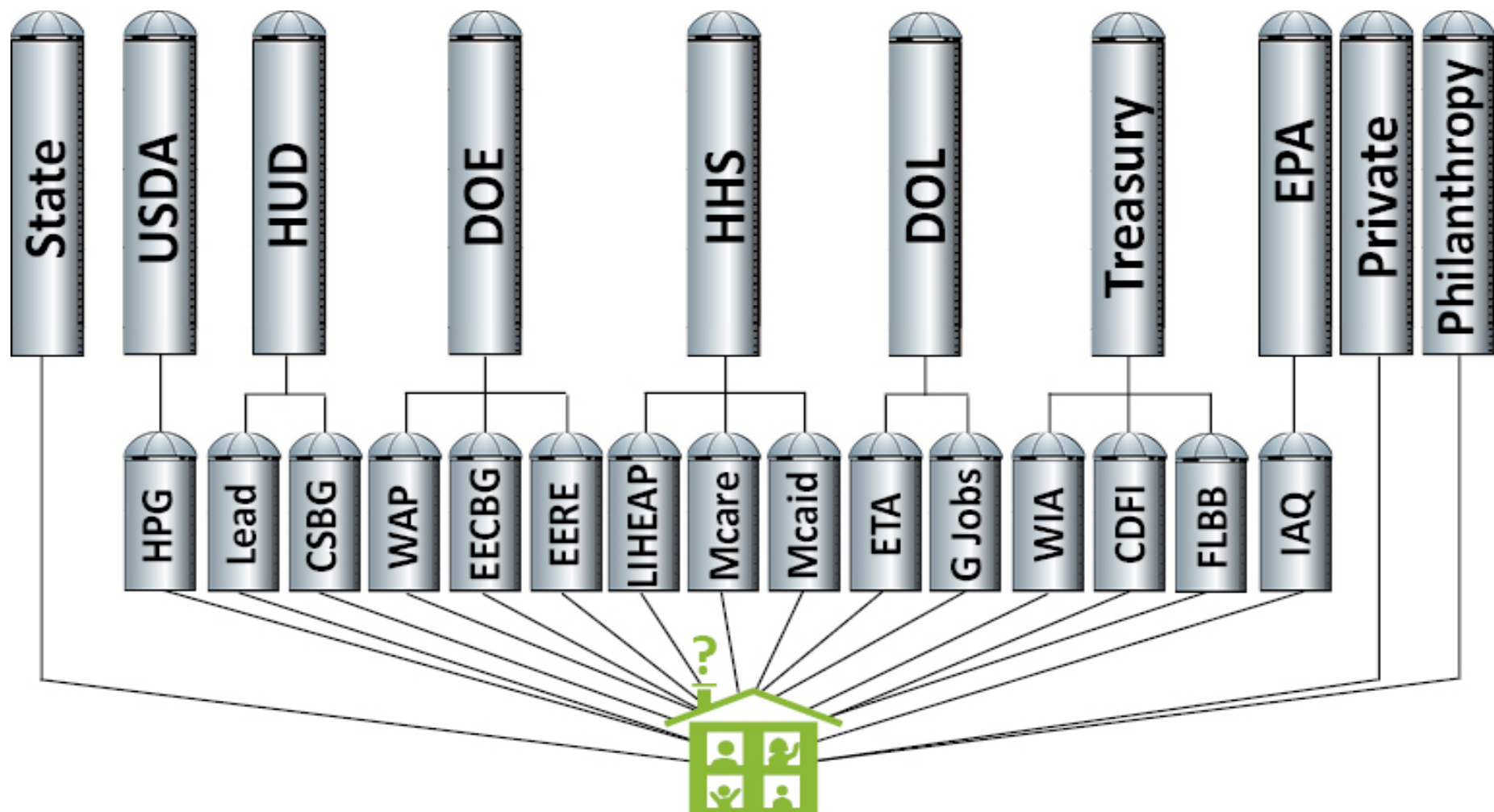
Green & Healthy Homes Initiative®

Problem/Root Cause

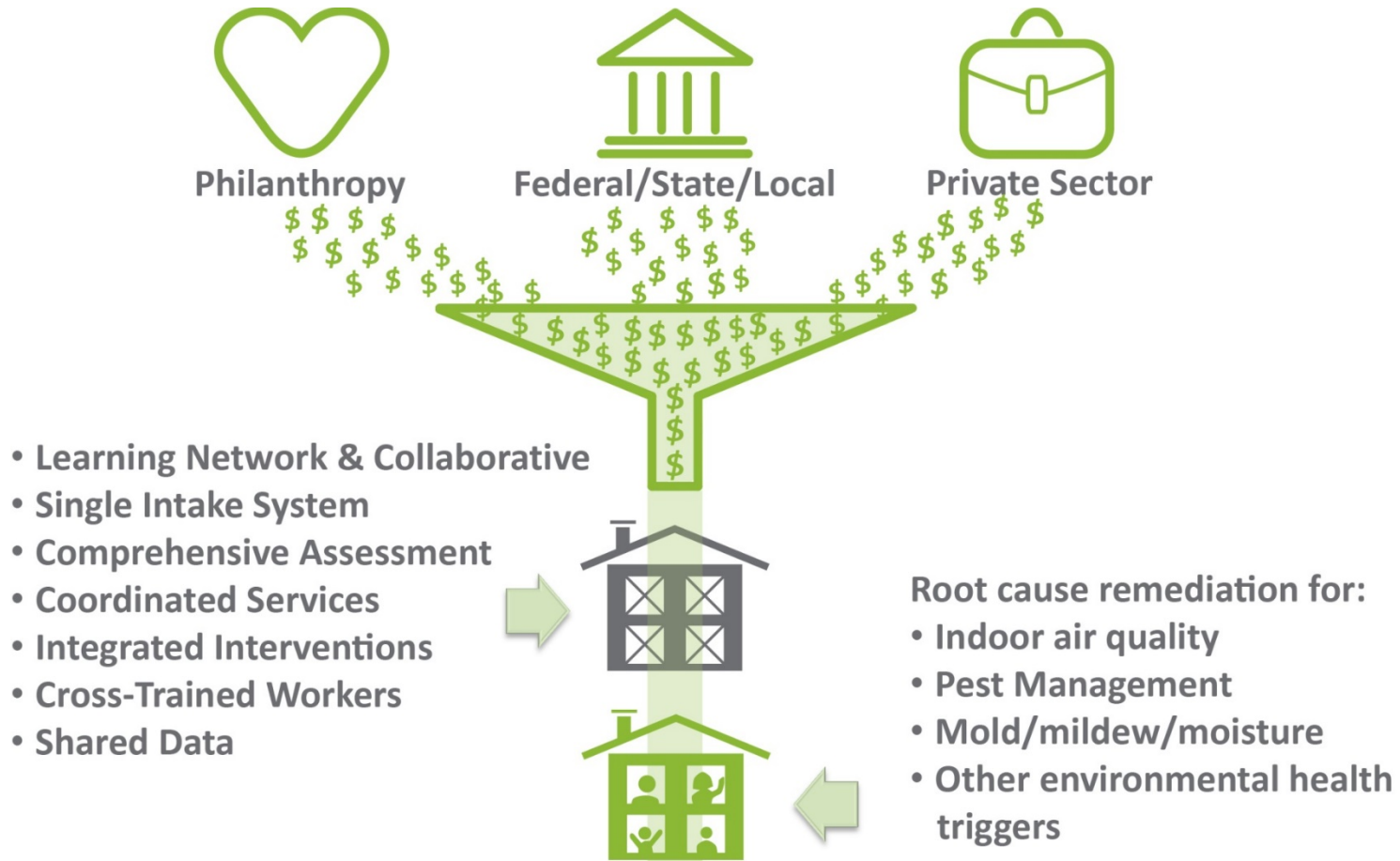
- The Commission on Building a Healthier America* found that **40%** of all incidents of asthma are attributable to home-based environmental health hazards.
- Department of Health and Human Services (HHS) Guidelines call for (1) Assessment of disease severity; (2) Medication; **(3) Patient education; and (4) Environmental control.**
- HHS's Community Preventive Services Task Force found “strong evidence of effectiveness of in-home environmental interventions” in improving asthma management.
- Return on investment: HHS's economic review of published studies showed a return of \$5.3 to \$14 for each \$1 invested.

**Robert Wood Johnson Foundation Commission on Building a Healthier America*

Healing a Fractured Delivery System



GHHI: A Model That Benefits Families





One Family's Story

DeWayne Davis, age 8, suffered from asthma caused by his unhealthy, energy-inefficient home, which was full of asthma triggers.



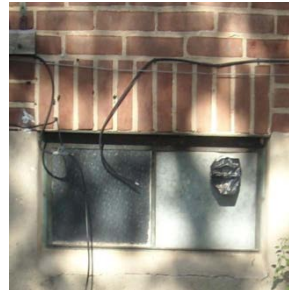
Old carpets =
allergens



Water leaks =
mold hazards



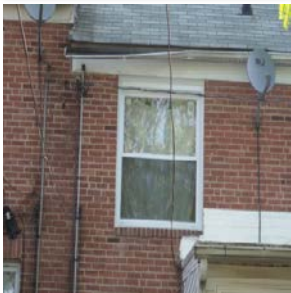
Deteriorated
windows = air leaks



Broken hot water
heater and furnace



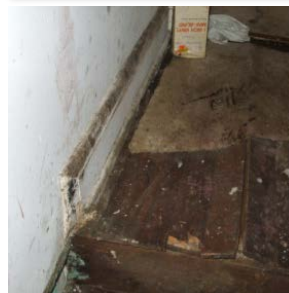
Defective gutters =
water leaks



Chipping paint =
lead hazard



Broken tile =
safety hazard



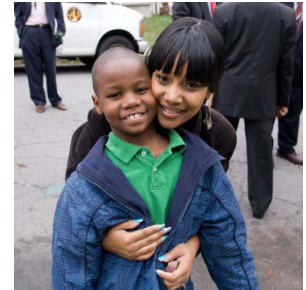
Broken ducts =
higher heating bills



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A Solution Through Braiding

An integrated approach cost 25% less to implement (\$12,057 vs. \$16,096), has kept DeWayne out of the hospital for asthma-related visits, improved his school attendance and reduced the family's monthly heating bills—and helped his mother achieve, as well.



Remove old carpets



HUD
(HHDP)

Remediate mold,
install dehumidifier



HUD
(HHDP)

Install ENERGY
STAR® windows



HUD
(HHDP)

Install furnace and
hot water heater



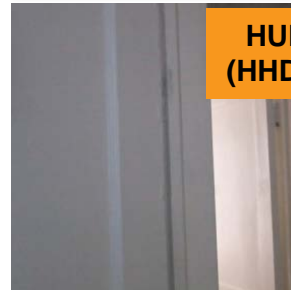
Philanthropy

Replace broken
gutters



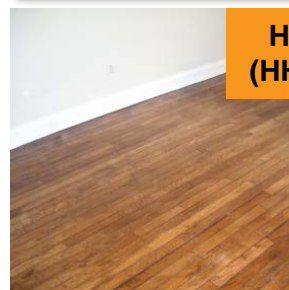
HUD
(HHDP)

Stabilize chipping
paint



HUD
(HHDP)

Resurface uneven
floors



HUD
(HHDP)

Seal ducts,
blow insulation



DOE
(WAP)



Green & Healthy Homes Initiative®



Healthy Homes Demonstration Project Findings

Mean Change and Percent Reduction
of Key Outcomes

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

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

Quality Improvements Pay Off

Current GHHI Baltimore Data—

- **68%** reduction in asthma-related client hospitalizations
- **34%** reduction in asthma ER visits
- **28%** reduction in visits to the physician's office due to asthma episodes
- **25%** reduction in calls to the physician's office due to asthma episodes

What These Data Mean: Reduced Costs

- Reduction in asthma-related client hospitalizations—**1 hospital stay on average costs \$7,506 in Baltimore City. By reducing hospitalizations we are helping to reduce costs.**
- Reduction in asthma-related emergency room visits—**1 emergency room visit on average costs \$820 in Baltimore City. By reducing ER visits, we are helping to reduce costs.**

What These Data Mean: Improved Opportunities

- **62%** improvement in school attendance
- **88%** reduction in missed work days for parents

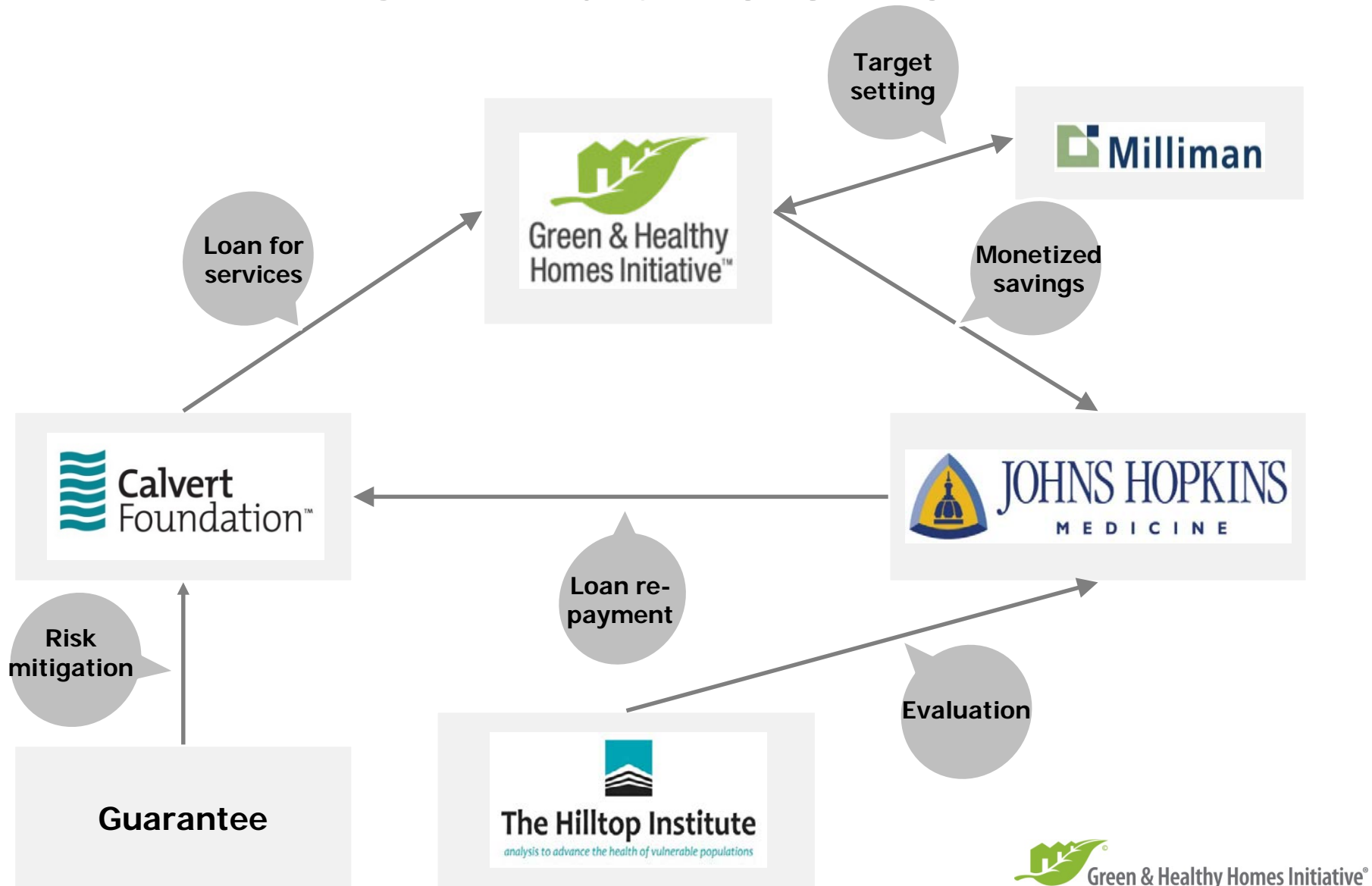
Pay for Success (PFS): Using Data to Scale Program Services

Current PFS Projects in the United States

Location	Issue	Budget	Time Frame
Massachusetts	Juvenile Justice	\$21.3 M	6 years
Massachusetts	Homelessness	\$3.5 M	6 years
Salt Lake County	Early Education	~\$7 M	1 year, additional years based on pending funding
State of New York	Adult Recidivism	\$13.5 M	5 ½ years
New York City	Juvenile Justice	\$16.8 M	4 years
Chicago	Early Education	\$16.9 M	4 years
Cuyahoga County	Homelessness / Foster Care	\$5 M	5 years

Also, asthma PFS demonstrations in Fresno and Alameda County, CA

GHHI Baltimore PFS





Year 1

Year 2

Year 3

Year 4

Year 5

Year 6

Year 7

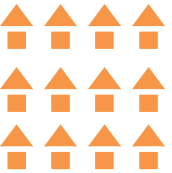
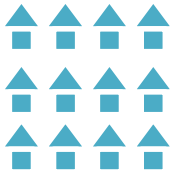
Draws

\$

\$

\$

Intervention



Evaluation



Savings & Payment



Guarantee

Guarantee

Payments

Players involved

Model flow

Timeline overview

Per-home economics

Needs

Progress to date

Policy implications

Challenges to Address

- Complexity of health care system, especially during broad health care reform
- Evaluation structure (e.g., randomized control trial? comparison group?)
- Accounting—making payment if the program is successful
- Sensitivity of actuarial projections on savings
- Identifying and having sufficient target population

Organizational Prerequisites

- Proven intervention/defined service model
- Compelling base of evidence and ability to track outcomes
- Infrastructure to scale interventions
- Organizational bandwidth (i.e., project manager, etc.)
- Know why you're doing this (e.g., To scale? To change policy?)
- Board support: These things take time, no guarantees

Benefits

SIBs/PFS can lead to sustainable funding for Healthy Homes

- Solving the “wrong pocket” problem

Investment directed
to improve housing



Savings produced
for health care



- Building the case for Medicaid reimbursement
 - ✓ Rigorous evaluation
 - ✓ Proving model at scale
 - ✓ Eliminates risk to government/health care/education system



Green & Healthy Homes Initiative®

Questions?

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Learn more on: [YouTube](#).

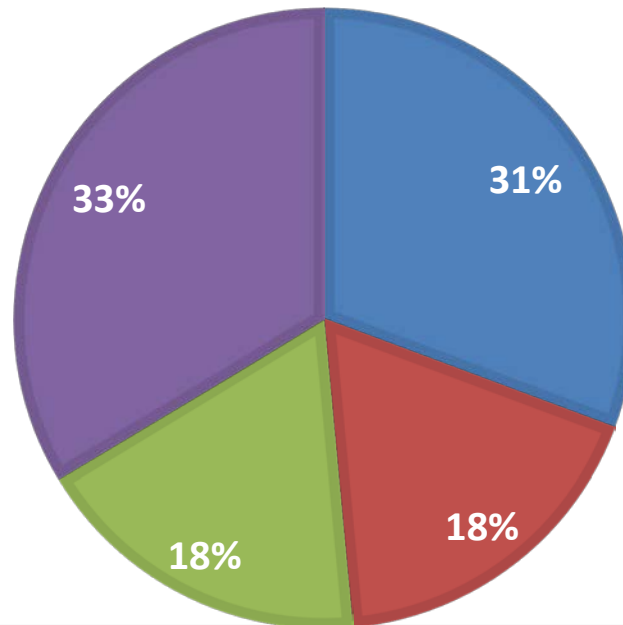


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Polling Question 3

After participating in this webinar, what would you like to hear more about in future webinars?

- Using data to demonstrate my program's value proposition
- Being visible to funders and publicizing my program's activities
- Compiling program data to tell a compelling story
- Creating a program infrastructure to prepare for funding



Thank You to Our Winners



Le Bonheur Children's Hospital's
CHAMP Program



Green & Healthy Homes Initiative