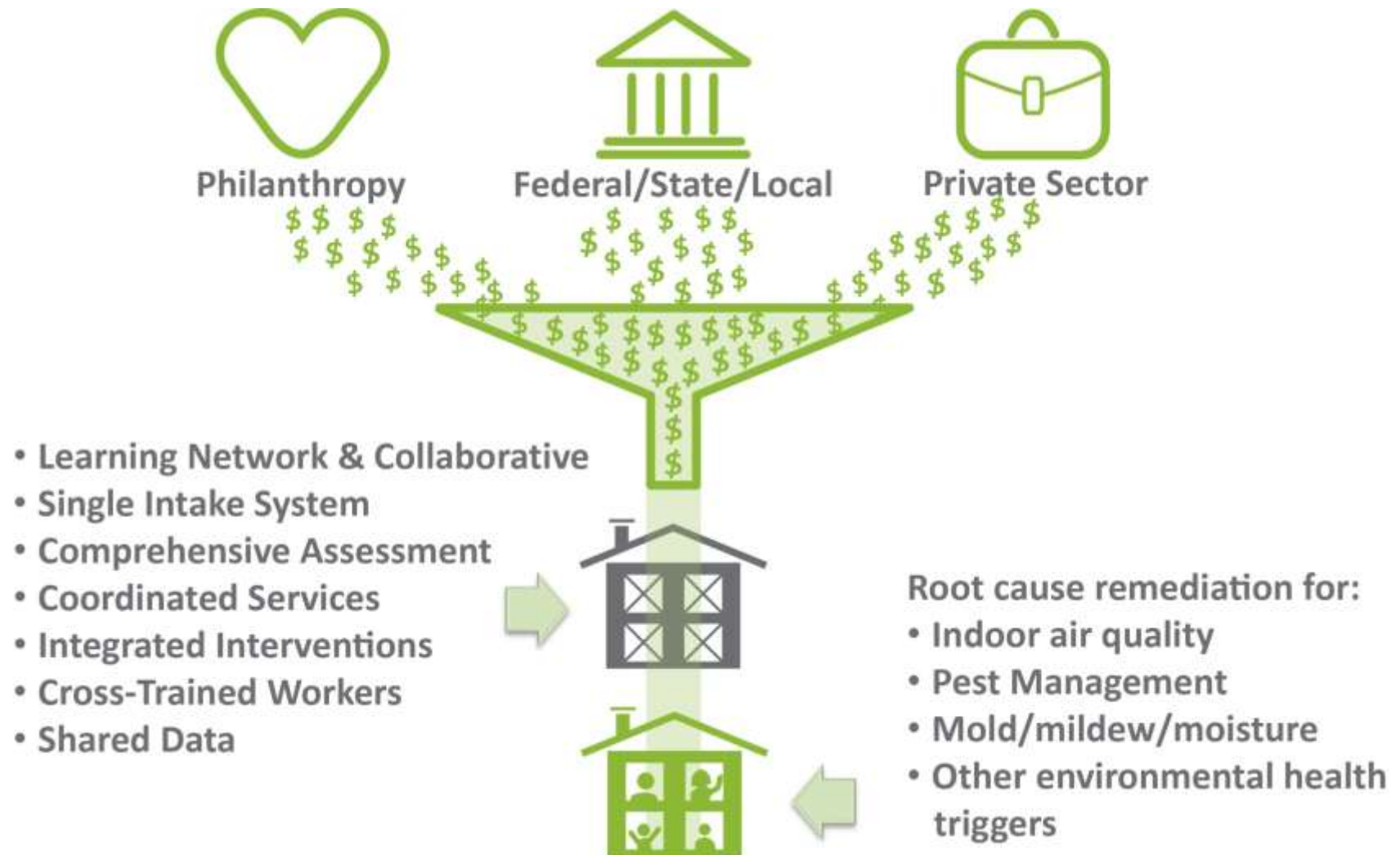


Innovative Funding for Asthma Interventions

Ruth Ann Norton
Green & Healthy Homes Initiative
November 20, 2015

The GHHI Model



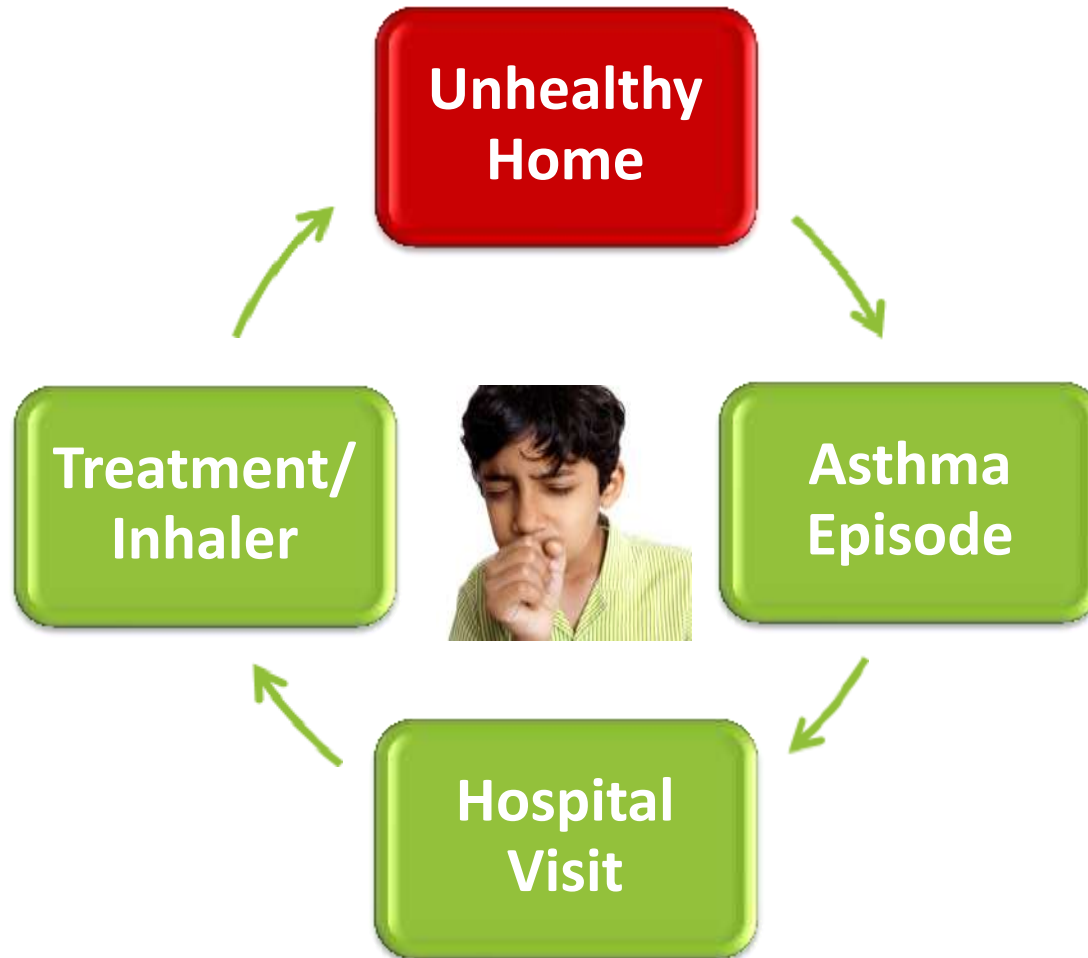
Evidence Base for Healthy Homes

- NAEPP Guidelines-based care calls 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 and overall quality of life for asthmatics.
- Cost benefit studies show a return of **\$5 to \$14 per \$1**.



Surgeon General's Call to Action to Promote Healthy Homes (2009)

Address Root Causes at Home



Integrated Assessment & Education

Environmental Assessor-Energy Auditor (HHS/BPI)

- Conduct pre-intervention environmental assessments / audits
- Develop comprehensive scopes of work for properties
- Conduct post intervention assessments and audits

Community Environmental Health Educator (CHES/AE-C)

- Conduct asthma/HH resident education during assessment
- Coordinate client health surveys and data collection
- Distribute HEPA-Vacuum and indoor allergen reduction kit
- Referrals and follow-up client services
- Review asthma action plan
- Medication adherence
- Ongoing education, behavioral reinforcement and band follow-up with PCP / care managers

Healthy Homes Interventions

- Installation of mattress and pillow covers
- Integrated pest management: gel baits, boric acid, glue traps, reducing entry points, cleaning/behavioral change (clutter)
- Mold remediation
- Venting kitchen, bathroom and dryer; filter replacements
- Removal or steam cleaning of carpets
- Air filtering system installed in child's bedroom
- Air conditioners and dehumidifiers
- Provision of a HEPA-vacuum and indoor allergen reduction cleaning kit
- Other Healthy Homes Interventions with leveraged funding (lead, radon, asbestos)

Impact: Building a Business Case

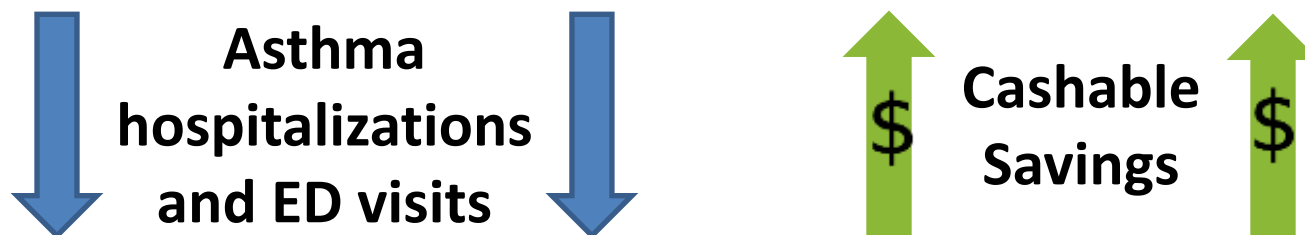
Green & Healthy Homes Initiative: Improving Health, Economic and Social Outcomes Through Integrated Housing Intervention

- **66%** reduction in asthma-related client hospitalizations
- **28%** reduction in asthma-related client ED visits
- **50%** increase in participants never having to visit the doctor's office due to asthma episodes
- **62%** increase in participants reporting asthma-related perfect attendance for their child (0 school absences due to asthma episodes)
- **88%** increase in participants reporting never having to miss a day of work due to their child's asthma episodes

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



[2009-10 data]

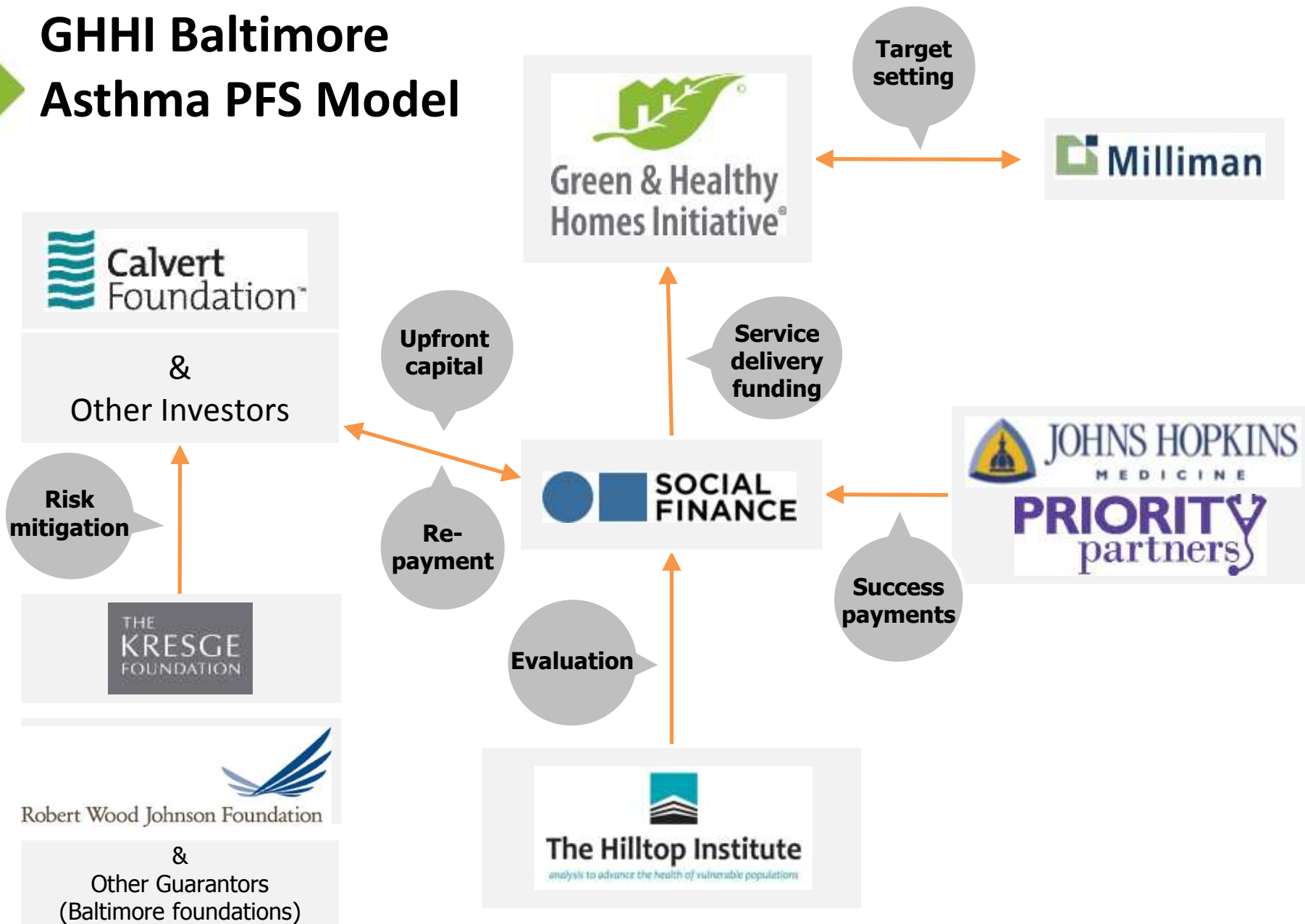
Payment Models

- Fee for service
- Fee per visit (fixed)
- Bundled payments (suite of services)
- Blending of funds (combination of healthcare-based funding and other funding streams such as philanthropic grants and HUD-based grants)
- Global payments (interventions budgeted with total costs of care and prevention activities)
- Outcome based payments (measured by quality indicators or medical utilization measures)

Medicaid Rule Change

- Opening up Reimbursement for non-clinical professionals
- Services must be recommended by a licensed clinical provider (physician or RN), but could be performed by other professionals such as certified asthma educators in the home
- To take advantage, each state has to submit a State Plan Amendment (SPA) to CMS laying out what services would be offered, the costs for those services, and what certification will be used for those professionals
- **Changes “Who” but not “What” for the services that are eligible**
- Education, case management, community health worker services

GHHI Baltimore Asthma PFS Model



GHHI selected to participate in Social Innovation Fund’s first PFS cohort with asthma PFS feasibility studies in 5 locations:

Location	Healthcare Org	Service Provider
Springfield, MA	Baystate Health	Partners for a Healthier Community
Memphis, TN	Le Bonheur Children’s Hospital	Habitat for Humanity of Greater Memphis
Buffalo, NY	Monroe Plan for Medical Care	Community Foundation of Greater Buffalo & Heart of the City Neighborhoods, Inc.
Grand Rapids, MI	Spectrum Health	Health Net, Healthy Homes Coalition, & Asthma Network of West Michigan
Salt Lake City, UT	University of Utah Health Plans	Salt Lake County Office of Regional Development

Key Questions

- Who should be involved?
- Which pathways seem most feasible?
- Who has the incentives?
- What are the known challenges?
- What are the expected outcomes?
- Who else may deliver these services?
- What payment structure makes sense?
- What are the political implications?

Preparing for Engaging Healthcare

- Documenting services (narrative, flow, case studies)
- Evidence Base
- Outputs, outcomes and metrics
- Defining the population served (characteristics / demographics / inclusion and exclusion criteria)
- Cost effectiveness / Business Case / ROI
- Capacity / Scaling considerations

Questions?

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