



# Health Starts at Home

INTERIM FINDINGS



## **ABOUT THE BOSTON FOUNDATION**

The Boston Foundation, Greater Boston's community foundation, seeks to bring the collective power of our region's people and resources together to drive real change. Established in 1915, it is one of the largest communication foundations in the nation—with net assets of \$1.3 billion. In 2019, the Foundation received \$151 million in contributions and the Foundation and its donors paid \$153 million in grants to nonprofit organizations. The Foundation has many partners, including its donors, who have established more than 1,000 separate charitable funds for the general benefit of the community or for special purposes. With support from the Annual Campaign for Civic Leadership, the Foundation also facilitates public discourse and action, commissions research into the most critical issues of our time that advocates for public policy that advances opportunity for everyone. The Philanthropic Initiatives (TPI), a consulting unit of the Foundation, designs and implements customized philanthropic strategies for families, foundations and corporations around the globe. To learn more about the Boston Foundation and its work, visit [TBF.org](http://TBF.org).

The **HEALTH STARTS AT HOME** initiative received funding support from the Annie E. Casey Foundation, Blue Cross Blue Shield of MA Foundation, The John D. and Catherine T. MacArthur Foundation, Kresge Foundation, Melville Charitable Trust, Partners HealthCare, and individual donors without whose partnership and contributions this work would not have been possible.

## Background

Over the last 10 to 15 years, research has shown that instability in housing, often driven by unaffordable rents, has a profoundly negative impact on children’s mental, behavioral and physical health. The result is higher health-care costs and increased burdens on homeless systems and providers. Linking housing-related supports and health-care provision emerged as a logical recommendation from these studies.

Health Starts at Home has been a five-year initiative hosted by the Boston Foundation to bring together housing and health-care organizations to pilot new approaches that focus on the active benefits of stable, affordable housing on children’s health outcomes. Health Starts at Home has supported partnerships among housing and health-care organizations with the goal of:

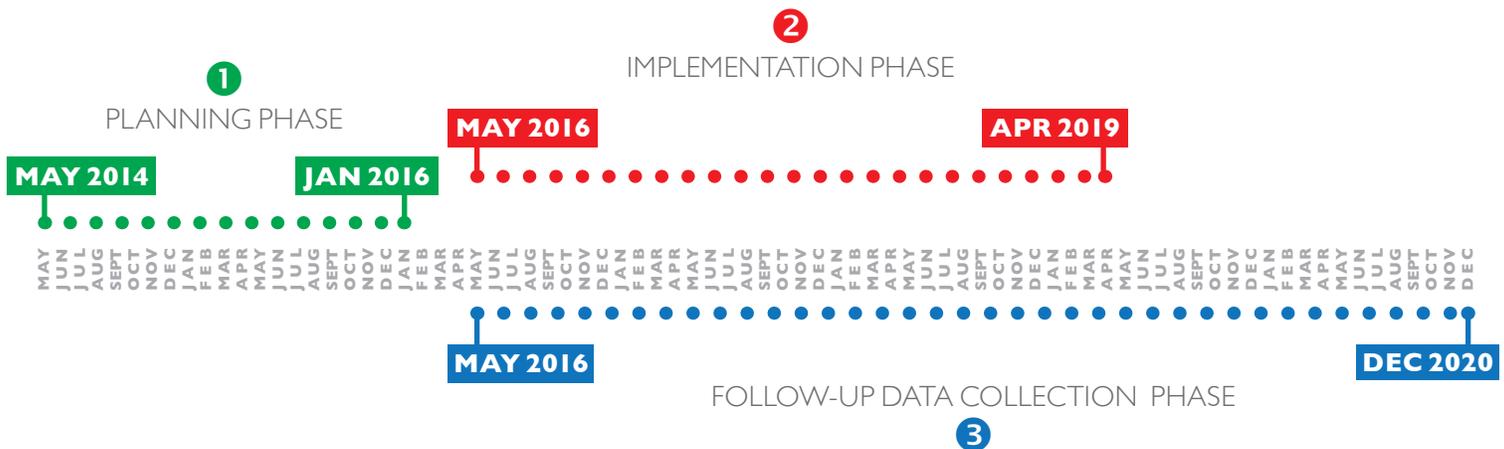
- highlighting the importance of affordable housing in children’s health outcomes;
- identifying promising new and existing models for partnership that can be brought to scale to improve children’s health outcomes;
- decreasing health-care costs; and
- decreasing costs related to homelessness.

Health Starts at Home partnerships worked with evaluation consultants, **Health Resources in Action (HRiA)** and the **Urban Institute**, to assess program effectiveness through a set of shared measures related to housing stability and children’s health. In addition, these partnerships received technical assistance and participated in a learning community to continually enhance their programs.

As we reach the five-year mark in this planned pilot program, we look back on the lessons learned and consider recommendations that participants and analysts have made for continuing or replicating similar multi-sectoral initiatives. The evaluation process is still ongoing.

## HSAH Timeline

In May 2016, the Boston Foundation selected four partnerships from among those invited to submit a proposal to receive three years of support (\$200,000 per year) to implement their program models and interventions, and to participate in an overarching evaluation of the initiative. The Foundation also provided support for an additional year of data collection and analysis to capture longer-term changes in housing and health outcomes.



## THE PARTNERSHIPS

### PARTNERS

Boston Health Care for the Homeless Program  
Urban Edge  
St. Mary's Center for Women & Children

### PARTNERS

The Neighborhood Developers  
Massachusetts General Hospital & MGH Chelsea HealthCare Center  
Metropolitan Boston Housing Partnership  
Roca

### PARTNERS

Children's HealthWatch  
Project Hope  
Boston Housing Authority  
Medical-Legal Partnership  
Nuestra Comunidad  
Boston Medical Center – Problem Solving Education  
BMC HealthNet Plan

### PARTNERS

Massachusetts Law Reform Institute  
Boston Children's Primary Care at Martha Eliot Health Center and Longwood  
Horizons for Homeless Children

### Building Bridges to Better Health

Boston Health Care for the Homeless Program, St. Mary's Center for Women & Children, and Urban Edge partnered to address the health disparities that homeless children experience. With their combined expertise, they have delivered a model of coordinated and integrated services designed to improve access to comprehensive health care, behavioral health services, social supports, benefits screenings and housing search services. This model has sought to ensure access to integrated services while families are in shelter, and to follow families as they transition into housing and support them during this tenuous time to prevent the financial, social and health crises that too often result in a return to homelessness.

### Chelsea Homes for Health

This partnership includes major institutions in Chelsea, a mid-size city just north of Boston with a largely immigrant population, where 50 percent of residents cannot afford stable unsubsidized housing. MGH Chelsea, the health-care provider serving the majority of households in the community, and Roca's program for young mothers have screened families for housing instability as a part of their regular course of care. The screening has provided partners with the knowledge and capacity to refer families to existing, robust services at CONNECT, a collaboration housed at The Neighborhood Developers, from short-term rental assistance to long-term stabilization supports, including benefits screening, financial coaching and services, workforce development resources, housing counseling and peer supports.

### Housing Prescriptions as Health Care

This partnership strove to create a seamless system of services for children under age four whose families are high users of emergency health-care services. Medical staff members often do not ask about a family's housing situation because they cannot offer "treatment." This model has built on the existing Children's HealthWatch interview protocol, enabling trained interviewers to ask validated questions and link families to care coordination services at Project Hope. Intensive case management has helped families find, retain and improve their housing by linking services of benefits maximization, legal services, problem solving education and priority access to public housing units.

### Mortar Between the Bricks: Building a One-Stop, Two-Generation Foundation for Health

This partnership includes a nationally-recognized medical provider and poverty law experts focused on policy reform and early childhood development specialists. They've joined forces to identify at-risk, housing insecure and homeless patients of Boston Children's Primary Care at Martha Eliot Health Center and Longwood, using a new universal housing screen. Dedicated social work staff at Martha Eliot coordinated interventions to stabilize families, including intensive legal services, housing workshops, parent trainings, early education and childhood development programs, and referrals to other social services. Through an integrated cross-referral system, this model intentionally focuses on services to both adults and their children, based on a two-generation framework informed by an advisory committee that includes patient parents.

# KEY FINDINGS FROM THE FIRST SIX MONTHS OF FOLLOW-UP

## Methods

During the HSAH program planning phase, the evaluators (HRiA and the Urban Institute) led the grantee partnerships through a collaborative process to develop a comprehensive set of shared core outcome measures. Each partnership has collected data on these measures at six-month intervals from all participating families, and transferred that data to HRiA for data cleaning and analyses. The key findings that we highlight from the first six-months of follow-up focus on changes in physical and mental health and comparisons based on homeless status at the time of enrollment. The Urban Institute has been analyzing Homeless Management Information System data, which tracks the use of homeless shelter and emergency assistance. Results detailed here pertain to the 182 families who enrolled in HSAH and completed both baseline and six-month follow-up questionnaires; 55 of these families were residing in shelter at baseline.

## Baseline Characteristics

To enroll, families had to meet at least one of four **eligibility criteria** (Figure 1); 58.8% (n=107) met two or more. Families residing in shelter at baseline were more likely to be eligible based on homelessness, whereas families not residing in shelter at baseline were more likely to be eligible based on inability to pay rent or housing cost burden. Other demographic characteristics include the following:

- The average **age of the enrolled child** was 3.2 years (range <1.0 to 11.8 years); children residing in shelter at baseline were significantly younger than those not residing in shelter at baseline (2.4 vs. 3.6 years; P=0.009).
- The average **household size** was 3.4 persons; families residing in shelter at baseline had a significantly smaller household size than those not residing in shelter at baseline (2.6 vs. 3.7 persons; P<0.001).
- 66.5% of families (n=121) reported speaking **Spanish** in the home while 28% (n=51) reported speaking **English** at home; English was significantly more common among families who were residing in shelter at baseline compared to families who were not (40.0% vs. 22.8%; P=0.034).
- 48.4% of caregivers (n=88) reported their **educational attainment** to be less than high school graduation or equivalent.
- 38.3% of families (n=67) reported monthly **household incomes** of \$500 or less (Figure 2); a significantly larger proportion of families residing in shelter at baseline reported such low income compared to families not residing in shelter at baseline (67.3% vs. 26.0%; P<0.001).

FIGURE 1  
**Families Meeting HSAH Eligibility Criteria, by Baseline Shelter Residence**

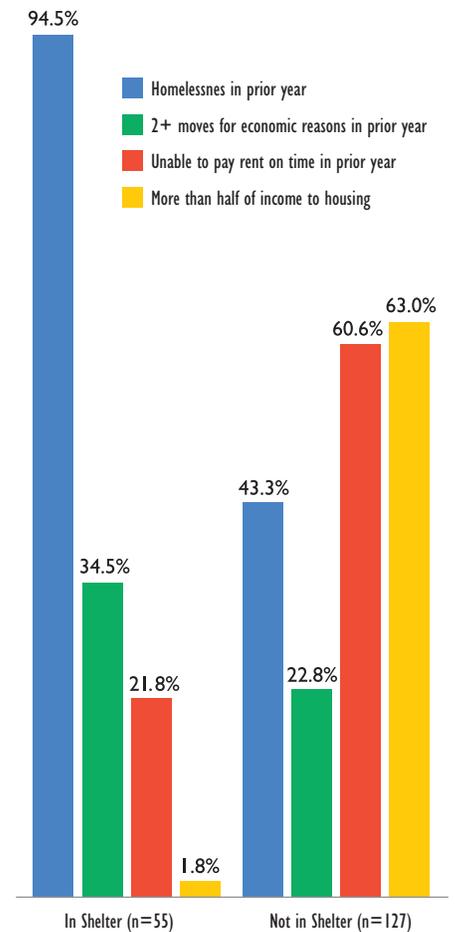
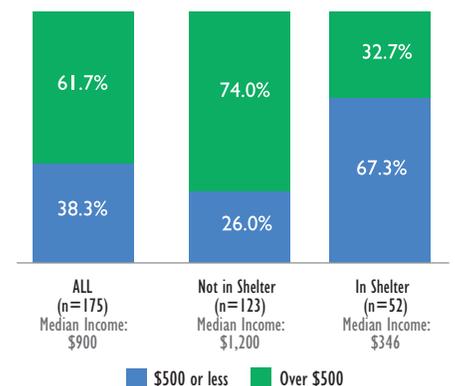


FIGURE 2  
**Monthly Household Income, by Baseline Shelter Residence**



## Homeless Management Information System (HMIS) Data

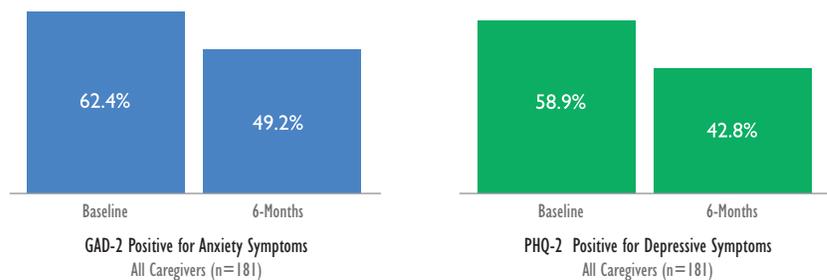
The Urban Institute tracked the **use of homeless shelter and requests for emergency assistance** for a subset of families who were enrolled by HSAH partnerships as of October 2018. Our analysis focuses on families enrolled at Mortar and Bridges because the other two partnerships provided incomplete data for the first data match. The Massachusetts Department of Housing and Community Development matched HSAH family IDs against its HMIS records between March 2013 and October 2018. On average this covered a period of 4.5 years before families enrolled in HSAH and one year after. The analysis found:

- 6% of families had a recorded shelter stay during the analysis period with an average length of stay in shelter of 348 days.
- Compared to all families enrolled at Mortar or Bridges, families that applied for shelter or emergency assistance had similar average incomes (\$824 versus \$828), but were less likely to identify as Hispanic (69% vs 80%)

## Changes in Health Outcomes Observed at Six Months

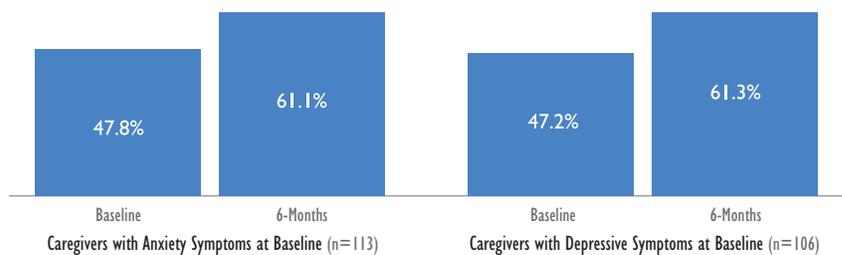
At baseline, 62.4% of caregivers screened positive for **anxiety symptoms** (n=113) and 58.9% for **depressive symptoms** (n=106). At six-month follow-up, symptoms had declined significantly for both (to 49.2% and 42.8%, respectively;  $P<0.05$ ) (Figure 3).

FIGURE 3  
**Caregivers Screening Positive for Anxiety or Depressive Symptoms**



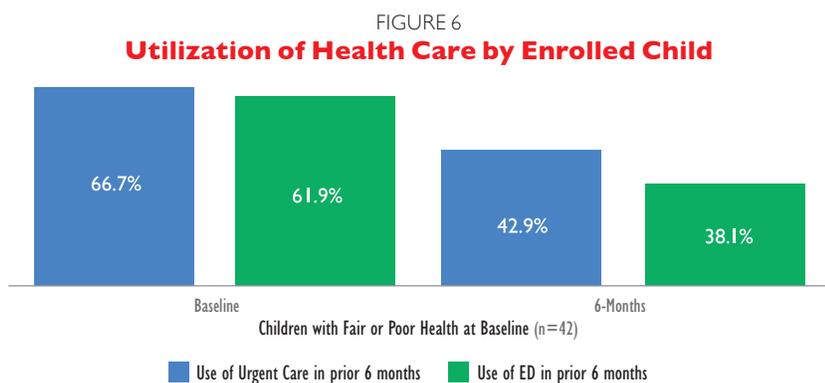
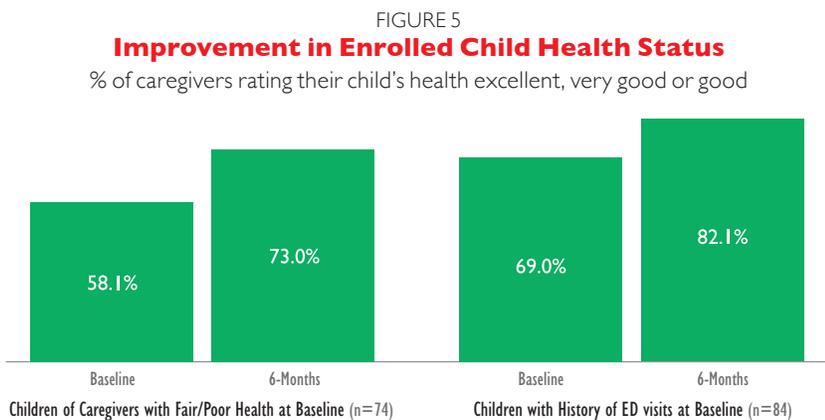
Overall, the proportion of **caregivers who rated their own health** as *excellent*, *very good* or *good* did not significantly change between baseline and six-month follow-up (58.6% vs. 65.2%;  $P=0.082$ ); however, significant improvements were observed among caregivers who screened positive for anxiety or depressive symptoms at baseline: The proportion of those rating their own health positively increased from 47.8% to 61.1% for caregivers with baseline anxiety symptoms ( $P<0.05$ ) and from 47.2% to 61.3% for those with baseline depressive symptoms ( $P<0.05$ ) (Figure 4).

FIGURE 4  
**Improvement in Caregiver Health Status**  
% of caregivers rating their own health excellent, very good or good



Overall, the proportion of **caregivers who rated the health of their enrolled child** as *excellent, very good* or *good* did not significantly change between baseline and six-month follow-up (76.8% vs. 82.9%;  $P=0.091$ ). Some subgroups of the population, however, saw significant increases in the proportion of caregivers rating the health of their child as *good* or better between baseline and six months. These groups include caregivers who rated their own health at baseline as *fair* or *poor* (going from 58.1% to 73.0%,  $P<0.05$ ), and caregivers whose enrolled children had a history of emergency department visits at baseline (from 69.0% to 82.1%;  $P<0.05$ ) (**Figure 5**).

- The proportion of children age 4 and older ( $n=57$ ) who screened positive for **psychosocial concerns** on the Pediatric Symptom Checklist declined significantly between baseline and six months (36.8% vs. 21.1%;  $P<0.05$ ), though no change was observed in Parents Evaluation of Developmental Status screening results of index children under the age of 4 ( $n=98$ ).
- Use of **urgent care or emergency department (ED)** services in the prior six months declined significantly among index children who had *fair* or *poor* health at baseline. The proportion declined from 66.7% to 42.9% for use of urgent care ( $P<0.05$ ) and from 61.9% to 38.1% for use of ED ( $P<0.05$ ) (**Figure 6**).



HRiA and the Urban Institute have also been tracking other metrics whose assessment will be more meaningful over a longer span than the initial six months of implementation. A report highlighting more complete findings will be forthcoming next year.

