A stable, decent, affordable home is an essential foundation for families to thrive. However, this foundation becomes increasingly unsteady when families’ housing becomes unaffordable — defined as paying more than 30 percent of monthly household income for rent or mortgage plus utilities. This brief introduces the Subsidized Housing Availability Index ("SHA Index") as a tool to measure the need for additional housing subsidies, and to understand the relationship between inadequate subsidies and the negative consequences of housing insecurity.

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**The Positive Ripple Effect of Affordable Homes**

**Improving Availability of Subsidized Housing Increases Access to Stable Homes**

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**“Housing insecurity”** is defined as the experience of:

- Moving twice or more in the past year
- Living in a crowded or doubled-up housing situation
- Being behind on rent in the past year, and/or
- Being homeless in the past year

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a. Our definition of subsidized housing units includes: public housing, Housing Choice Vouchers, and Section 8 New Construction and Moderate Rehabilitation.

b. Fair/poor health, contrasted with excellent/good health, are responses to a long-standing, widely validated health status question. Fair/poor health is strongly positively associated with high utilization of health care services, and higher health care costs than average.

**Housing-Insecure Families Face Health Risks**

Young children in housing-insecure families are more likely to be in fair or poor health, at risk for developmental delays, or seriously underweight, and to live in households that struggle to afford enough food (food insecurity), compared to similar children in housing-secure families.

Housing insecurity is also linked to:

- Difficulty paying heat or light bills (energy insecurity), which can which places children at further risk for poor health and development.
- Toxic stress, a precursor to chronic disease and learning and behavior problems later in life.

**Food Insecurity:**
When families lack access to enough food for all members to lead active, healthy lives because of insufficient family resources.

**Energy Insecurity:**
Limited or uncertain access to enough home energy to sustain a healthy and safe life.

**Affordable Housing:**
When a household pays no more than 30 percent of their total household income for rent and utilities.

**Housing Subsidies Protect Health**

Housing subsidies are intended to ensure that a household pays no more than 30 percent of total household income for rent and utilities, thus meeting the national standard for housing cost affordability. Receipt of a housing subsidy has been associated with:

- Positive physical and mental health outcomes in children.
- Lower risks of hospitalization, iron deficiency anemia, and under-nutrition among children, supporting physical growth and overall health.

Independent of housing subsidies, the Fragile Families and Child Wellbeing Study found the availability of affordable housing units provided a buffer against housing insecurity. However, despite strong evidence on the benefits of affordable housing and housing assistance, the supply of neither is sufficient to meet the need — not a single county in the United States can meet 100 percent of its low-income population’s need for affordable housing.
The Subsidized Housing Availability Index

The Subsidized Housing Availability Index (SHA Index) is an evidence-based tool for assessing availability of subsidized housing units in a given area relative to need, and estimating likely impacts on housing insecurity of increasing their supply. It represents the supply — the total number of subsidized units available (both occupied and unoccupied) — relative to the number of low-income households considered cost-burdened (when a household pays more than 30 percent of their household income for rent and utilities).
Using the SHA Index to Estimate Effects of Increased Subsidized Housing Stock

Research from Children’s HealthWatch shows that, in the 5 cities it studies, increasing the availability of subsidized housing by 5 percent (an additional 50 units per 1,000 already existing) results in two positive short-term outcomes: one immediate, and a second “ripple effect”

1. Immediately, there are 50 fewer cost-burdened households (per 1,000 existing subsidized housing units) struggling to afford rent because they are now paying no more than 30 percent of their income for their subsidized housing.

2. Due to an indirect ripple effect, there is a significant decrease in short-term pressure of demand in the market for affordable housing, reflected in the lower odds of remaining cost-burdened households having to live in over-crowded housing (20 percent reduction) or make multiple moves in search of affordable housing (30 percent reduction).

The SHA Index And Its Ripple Effect in a Hypothetical Mid-Sized U.S. City

Researchers estimate that the following changes would occur:

- **Direct Effect:**
  - 700 fewer households that are overcrowded
  - 100 fewer households with multiple moves

- **Ripple Effect:**
  - 5,460 fewer households that are overcrowded
  - 1,170 fewer households with multiple moves

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e. There are other forms of housing instability not included in this analysis. These estimates may be underestimates.
Aside from the families who no longer have to worry about whether they can afford their housing due to the increased number of vouchers or subsidized housing units available, reduced pressure on the available supply of market-rate housing decreases the likelihood that the remaining families will have to double up or crowd with another family. Moreover, there is less need to move again and again in search of cheaper housing, as the housing they have is more likely to fit their family budget.

Example: Using the SHA Index to Estimate Effects of Increased Subsidized Housing Stock

Let us imagine a mid-sized metropolitan area with an unmet need for 100,000 units of subsidized housing, while the number of available subsidized housing units is only 50,000. The SHA Index would be 0.33 (Calculation= 50,000 / (100,000+50,000)). The SHA Index increases as more units are available relative to the demand. Despite the large need, significant improvements in housing security could be achieved with 2,500 additional subsidized housing units (=0.05 x 50,000), corresponding to a 5 percent increase in the SHA Index to 0.35.

The SHA Ripple Effect

A 5% increase in the SHA Index not only reduces the number of eligible families without access to subsidized housing as households take advantage of these newly available supports, but also — among remaining families still needing affordable housing — is associated with:

→ A 20 percent reduction in relative risk of overcrowding, and
→ A 30 percent reduction in relative risk of multiple moves.18

For this hypothetical example, the expected numbers of households living in overcrowded housing and making multiple moves are based on Children’s HealthWatch data for five US cities combined (Baltimore, Boston, Little Rock, Minneapolis, and Philadelphia). The Relative Risk Ratios are also based on Children’s HealthWatch data from our five sites combined.

For others who wish to use this approach to estimate the reductions in numbers of households expected to be living in overcrowded housing or making multiple moves after an increase in supply of subsidized housing in their area, they would need to assume results from our data are a reasonable representation of their own area—or would need to collect comparable data for their own area. For a step-by-step explanation for calculating the SHA Index and estimating its ripple effects, please visit www.childrenshealthwatch.org/shai/.
Before adding these additional 2,500 subsidized units, we would expect, based on evidence from our five study sites, 28 percent of the households comprising the “unmet need” population to be living in overcrowded housing (28,000 households), and 4 percent to make multiple moves (4,000 households). However, the 5 percent increase in the SHA Index leads to two positive short-term outcomes, one immediate, and a second “ripple effect.”

1. 2,500 households move into the added subsidized units, leaving 97,500 housing-burdened households

2. 5,460 fewer of the remaining housing-burdened households are expected to be overcrowded (20 percent reduction), and 1,170 fewer of the 3,900 remaining housing-burdened households are expected to experience multiple moves (30 percent reduction).

Conclusions

Housing insecurity has consistently been associated with harmful health and developmental impacts on children, including impaired readiness to learn, poorer academic performance, lower educational attainment, and reduced ability to become a productive member of society. Given the strong association of housing insecurity with poor child health and developmental outcomes and impaired human capital accumulation, state and federal investments to expand the stock of subsidized housing can prevent housing insecurity and thereby help parents to provide the family stability so critical to children’s ability to grow and thrive.
Recommendations for applying the SHA Index to policy

**Plan for Subsidized Housing Need**

→ **Utilize the SHA Index to Assess Supply and Demand:** Currently, limited measures of availability of subsidized housing exist besides the SHA Index. Therefore, we recommend the SHA Index be used as a method to ascertain and depict supply and demand for subsidized housing and to determine in which locations additional subsidized housing units might have the greatest impact.

→ **Utilize the SHA Index to Inform Zoning Policies:** The SHA Index can provide a tool for state and city-level governments to examine zoning laws. City-level policy makers could use the SHA Index to identify the availability of and need for additional subsidized housing to inform and guide changes in zoning policies that are acting as barriers to construction of new subsidized or affordable housing developments.

**Increase Access to Affordable Housing**

→ **Support and Endorse Policy Tools Favoring Creation of Affordable Housing:** Policy tools encouraging specific housing creation targets over concrete timeframes can help move the needle on increasing supply in innovative ways. One example would be passing zoning reform legislation aimed at creating small-scale housing development demonstration programs that create no less than one thousand units of subsidized housing within four years of enactment.

→ **Support Vital Funding Sources for Subsidized Housing:** In addition to Section 8 and non-mobile voucher funding sources, funding sources such as the Housing Trust Fund model have been successful and sustainable at both state and city levels in several locations. Ensuring stable, steady funding for housing vouchers and the National Housing Trust Fund is critical to growing the supply of affordable housing.

→ **Support inclusionary zoning:** Inclusionary zoning leverages the private real estate market to deliver public benefits by requiring that new residential developments include a minimum percentage of low- and moderate income housing. The SHA Index can serve as a tool to encourage adoption of inclusionary zoning policies.
About Children’s HealthWatch

Children’s HealthWatch is a nonpartisan network of pediatricians, public health researchers, and children’s health and policy experts. Our network is committed to improving children’s health in America. We do that by first collecting data in urban hospitals across the country on infants and toddlers from families facing economic hardship. We then analyze and share our findings with academics, legislators, and the public. These efforts help inform public policies and practices that can give all children equal opportunities for healthy, successful lives.

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References


18. Based on converting the adjusted odds ratios (AORs) to Relative Risk Ratios using: RR = OR/(1-Po+Po*OR), where OR = the Odds Ratio, and Po = Proportion of the unexposed (those under conditions of no increase in the number of subsidized housing units) who develop the outcome, or become cases (make multiple moves or live in overcrowded housing).