Housing Instability Among Families With Young Children With Special Health Care Needs

Ruth Rose-Jacobs, ScD,a,b Stephanie Ettinger de Cuba, MPH,a Allison Bovell-Ammon, MDiv,a Maureen M. Black, PhD,a,b, c Sharon M. Coleman, MS, MPH,c,d Diana Cutts, MD,e Mariana Chilton, PhD, MPH,f Timothy Heeren, PhD,f Patrick Casey, MD,f,i Eduardo Ochoa, MD,i Deborah A. Frank, MD,a,b Megàn Sandel, MD, MPH,a,b

abstract

BACKGROUND AND OBJECTIVE: Children with special health care needs (SHCNs) have significant medical and educational expenses affecting household finances. Housing instability can be detrimental to family well-being. Our objective was to evaluate housing instability in households of children with and without SHCNs.

METHODS: Cross-sectional surveys (2013–2017) in English and Spanish of caregivers with children <4 years old were conducted at 5 hospitals. The children with SHCN screener and caregiver report of child Supplemental Security Income (SSI) receipt were used to categorize children into the following groups: (1) no SHCNs, (2) SHCNs and no SSI, or (3) SHCNs and receiving SSI. Housing instability was determined by positive endorsement of ≥1 adverse circumstance: behind on rent or mortgage, or moving twice or more in the past year, or homelessness in the child’s lifetime. Analyses used multivariable logistic regression models, adjusting for demographics and housing subsidies.

RESULTS: Of 14 188 children, 80% had no SHCNs, 16% had SHCNs and no SSI, and 4% had SHCNs and received SSI. Compared with the no-SHCNs group, the SHCN–no-SSI group but not the SHCN–receiving-SSI group experienced significantly greater adjusted odds of being behind on rent or mortgage (adjusted odds ratio [aOR] 1.28 [95% confidence interval (CI) 1.14–1.44]; \( P < .001 \)), multiple moves (aOR 1.29 [95% CI 1.05–1.59]; \( P = .01 \)), and homelessness (aOR 1.44 [95% CI 1.20–1.72]; \( P < .001 \)).

CONCLUSIONS: Families of children with SHCNs are at risk for housing instability. Child SSI receipt decreased the risk of housing instability among families of children with SHCNs. Protecting families of young children with SHCNs from housing instability is an important investment.

WHAT’S KNOWN ON THIS SUBJECT: Children with special health care needs (SHCNs) have significant medical and educational expenses, potentially stressing household finances and affecting the ability of families with low income to meet basic needs. Housing instability has important consequences for child and parental health.

WHAT THIS STUDY ADDS: Among families with low income, those with a young child with SHCNs, not necessarily diagnosed with a disability, are at greater risk of housing instability than families with a young child without SHCNs.
unstable housing.10 Affected by food insecurity and children generally.1 Health care and related services emotional condition and requiring developmental, behavioral, or being at risk for a chronic physical, health care needs (SHCNs) as having interventions.5

Disproportionately these economic stressors, families and/or educational needs.8,9 Given these economic stressors, families with children with SHCNs may be disproportionately financially affected by food insecurity and unstable housing.10–12

Families raising a child with developmental disabilities (a subset of children with SHCNs), defined by the federal government as chronic physical and/or mental impairments associated with marked or severe functional limitations expected to last at least 12 months or cause death,13 may incur greater medical expenses than families raising a child with SHCNs without a disability. The Supplemental Security Income (SSI) program, developed to offset some economic burdens such as lost parental wages, provides financial assistance for children's basic needs. The SSI application process requires extensive documentation of (1) disability by multiple medical and/or educational clinicians and (2) family low income and/or limited assets.14 Thus, SSI receipt represents disability severity, economic vulnerability, and elevated need for intervention services.15 Only 1.7% of all children in the United States receive SSI or other disability benefits.16

Unstable housing exerts detrimental effects on family and child health and well-being, regardless of SHCN status.17–19 A recent investigation in a multisite sample of children ≤ 4 years old found that 3 adverse housing circumstances were associated with adverse child and caregiver health: being behind on rent in the previous year, experiencing multiple moves in the previous year, and any homelessness during the child's lifetime.11 The current study addresses whether the prevalence of unstable housing is higher among families of young children with SHCNs compared with families of children without SHCNs, with a secondary focus on children who receive SSI, on the basis of their disability and family income.

Ghosh and Parish20 used 2004 and 2008 panels of the Survey of Income and Program Participation data to examine material hardships among families of children age 0 to 17 years with and without a disability. Families of children with a disability were less likely to report full rent or mortgage payment compared with families with children without a disability, and there were no differences between families receiving and not receiving SSI. To our knowledge, no published research has evaluated the odds of multiple forms of housing instability in families of children < 4 years old with or without SHCNs and associations of SSI receipt.

Our study evaluated associations of having a young child with SHCNs, receiving or not receiving SSI, and 3 adverse circumstances of unstable housing. We hypothesized that households with a child with SHCNs have greater adjusted odds of housing instability when compared with households in which the index child does not have SHCNs. At a secondary level, we hypothesized that among families of children with SHCNs, families receiving SSI versus those not receiving SSI are less likely to report housing instability.

METHODS

Participants

Data were collected as part of Children's HealthWatch, an ongoing cross-sectional study monitoring the health and well-being of young children and families in medical centers in 5 US cities: Baltimore, Maryland; Boston, Massachusetts; Little Rock, Arkansas; Minneapolis, Minnesota; and Philadelphia, Pennsylvania. Each site obtained institutional review board approval before study initiation and yearly thereafter. Recruitment for these analyses (2013–2017) began when the SHCNs screener was added to the interview.

Caregivers of children < 48 months old were approached in private settings when seeking pediatric care in the primary care sites (Baltimore, MD, and Minneapolis, MN) and emergency departments (Baltimore, MD; Philadelphia, PA; Boston, MA; and Little Rock, AR). Eligibility criteria included the following: index child age < 48 months old, caregiver is a state resident, fluency in English or Spanish, and knowledge of child's health and household. Caregivers of critically ill and/or injured children or those interviewed within the previous 6 months were not approached.
Of 17,467 caregivers approached by a trained research assistant, 15,303 (87.6%) agreed to be screened, and of those screened, 14,188 (92.7%) eligible caregivers gave consent and completed the face-to-face interview.

**Measures**

The interview included the following sample characteristics: caregiver age, race and/or ethnicity, US birth, educational attainment, marital or partnered status, and employment status; child’s health insurance status; household receipt of housing assistance and/or energy assistance (Low Income Home Energy Assistance Program [LIHEAP]) within the past year; and number of children in the household. Child age and sex were obtained via medical records.

The independent variable, child’s SHCN status, was identified in the interview by using the Children With Special Health Care Needs Screener, a validated, 5-item, caregiver-reported screening tool used by the Maternal and Child Health Bureau and National Center for Health Statistics of the Centers for Disease Control and Prevention. Children screen positive for SHCN, regardless of medical diagnosis, if at least 1 of the following health circumstances has lasted or is expected to last >12 months: (1) use or need of prescription medication other than vitamins; (2) greater than average use or need of medical, mental health, or educational services; (3) functional age-related limitations; (4) use or need of specialized therapies; and/or (5) treatment or counseling for emotional or developmental problems. Caregivers were asked about current receipt of child SSI, allowing us to categorize children into 3 groups: (1) no SHCNs, (2) SHCNs and no SSI, and (3) SHCNs and receiving SSI.

The dependent variable was housing instability. Families were categorized as experiencing housing instability if they reported (1) being behind on rent or mortgage in the previous year.

---

**TABLE 1** Demographics for 3 Family Groups: Children Without SHCNs, With SHCNs Not Receiving Child SSI, and With SHCNs Receiving Child SSI

<table>
<thead>
<tr>
<th></th>
<th>Overall</th>
<th>Children Without SHCNs</th>
<th>Children With SHCNs</th>
<th>( P )</th>
</tr>
</thead>
<tbody>
<tr>
<td>( N )</td>
<td>14,188</td>
<td>11,408 (80.4)</td>
<td>2193 (15.5)</td>
<td>587 (4.1)</td>
</tr>
<tr>
<td>Site, ( n ) (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baltimore</td>
<td>2915 (20.5)</td>
<td>2238 (19.6)</td>
<td>558 (24.5)</td>
<td>119 (20.3)</td>
</tr>
<tr>
<td>Boston</td>
<td>3016 (21.3)</td>
<td>2510 (22.0)</td>
<td>418 (18.1)</td>
<td>88 (15.0)</td>
</tr>
<tr>
<td>Little Rock</td>
<td>3237 (22.8)</td>
<td>2592 (22.7)</td>
<td>407 (18.6)</td>
<td>238 (40.5)</td>
</tr>
<tr>
<td>Minneapolis</td>
<td>1911 (13.5)</td>
<td>1772 (15.5)</td>
<td>103 (4.7)</td>
<td>36 (6.1)</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>3109 (21.9)</td>
<td>2296 (20.1)</td>
<td>707 (32.2)</td>
<td>106 (18.1)</td>
</tr>
<tr>
<td>Caregiver Age, y, mean ± SD</td>
<td>27.8 (6.1)</td>
<td>27.7 (6.0)</td>
<td>27.9 (6.0)</td>
<td>29.2 (6.3)</td>
</tr>
<tr>
<td>US born, ( n ) (%)</td>
<td>10,573 (74.7)</td>
<td>8216 (72.2)</td>
<td>1869 (85.4)</td>
<td>488 (83.3)</td>
</tr>
<tr>
<td>Race and/or ethnicity, ( n ) (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>4715 (33.6)</td>
<td>3905 (34.6)</td>
<td>658 (30.3)</td>
<td>151 (26.1)</td>
</tr>
<tr>
<td>African American, non-Hispanic</td>
<td>6527 (46.5)</td>
<td>5162 (45.7)</td>
<td>1077 (49.6)</td>
<td>288 (49.8)</td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>2272 (16.2)</td>
<td>1798 (15.9)</td>
<td>348 (16.1)</td>
<td>125 (21.6)</td>
</tr>
<tr>
<td>Other</td>
<td>520 (3.7)</td>
<td>419 (3.7)</td>
<td>87 (4.0)</td>
<td>14 (2.4)</td>
</tr>
<tr>
<td>Education, ( n ) (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some high school or less</td>
<td>3154 (22.3)</td>
<td>2587 (22.7)</td>
<td>448 (20.4)</td>
<td>119 (20.3)</td>
</tr>
<tr>
<td>High school graduate</td>
<td>5457 (38.5)</td>
<td>4445 (39.0)</td>
<td>803 (36.6)</td>
<td>208 (35.6)</td>
</tr>
<tr>
<td>Some college or higher</td>
<td>5562 (39.2)</td>
<td>4362 (38.3)</td>
<td>941 (42.9)</td>
<td>258 (44.1)</td>
</tr>
<tr>
<td>Married/partnered</td>
<td>4218 (29.8)</td>
<td>3448 (30.3)</td>
<td>595 (27.1)</td>
<td>177 (30.2)</td>
</tr>
<tr>
<td>Employment, ( n ) (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≥30 h</td>
<td>4849 (35.2)</td>
<td>3896 (35.2)</td>
<td>807 (37.5)</td>
<td>146 (25.4)</td>
</tr>
<tr>
<td>&lt;30 h</td>
<td>1570 (11.4)</td>
<td>1271 (11.5)</td>
<td>248 (11.5)</td>
<td>51 (8.9)</td>
</tr>
<tr>
<td>Unemployed</td>
<td>7363 (53.4)</td>
<td>5890 (53.3)</td>
<td>1095 (50.9)</td>
<td>378 (65.7)</td>
</tr>
<tr>
<td>Child Age in mo, mean ± SD</td>
<td>19.6 (14.0)</td>
<td>18.0 (13.7)</td>
<td>26.7 (12.9)</td>
<td>25.4 (13.9)</td>
</tr>
<tr>
<td>Female sex, ( n ) (%)</td>
<td>6526 (46.0)</td>
<td>5389 (47.2)</td>
<td>892 (40.7)</td>
<td>245 (41.7)</td>
</tr>
<tr>
<td>Health insurance, ( n ) (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>12,273 (86.7)</td>
<td>9755 (85.7)</td>
<td>1968 (89.9)</td>
<td>550 (93.7)</td>
</tr>
<tr>
<td>Private</td>
<td>1186 (8.4)</td>
<td>973 (8.5)</td>
<td>185 (8.4)</td>
<td>30 (5.1)</td>
</tr>
<tr>
<td>No insurance</td>
<td>705 (5.0)</td>
<td>660 (5.8)</td>
<td>38 (1.7)</td>
<td>7 (1.2)</td>
</tr>
<tr>
<td>Household characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. children in household, mean ± SD</td>
<td>2.3 (1.3)</td>
<td>2.3 (1.2)</td>
<td>2.4 (1.3)</td>
<td>2.3 (1.3)</td>
</tr>
<tr>
<td>Receipt of housing assistance, ( n ) (%)</td>
<td>2507 (17.8)</td>
<td>1976 (17.5)</td>
<td>437 (20.1)</td>
<td>94 (16.1)</td>
</tr>
<tr>
<td>Receipt of LIHEAP, ( n ) (%)</td>
<td>2642 (19.2)</td>
<td>1973 (17.9)</td>
<td>523 (24.6)</td>
<td>148 (25.3)</td>
</tr>
</tbody>
</table>

* \( P \) value represents 3-group \( \chi^2 \) comparison.

### Notes

1. \( P \) value represents 3-group \( \chi^2 \) comparison.

Downloaded from [www.aappublications.org/news](http://www.aappublications.org/news) by guest on July 10, 2019

PEDIATRICS Volume 144, number 2, August 2019
(2) moving ≥2 times in the past year (multiple homelessness moves), and/or (3) homelessness within the child’s lifetime (living in a shelter, motel, temporary or transitional living situation, or scattered-site housing or no steady place to sleep at night).11

Data Analyses
To assess sample characteristics, we stratified the groups into 3 categories (no SHCNs, SHCNs and no SSI, and SHCNs and receiving SSI). Bivariate associations were assessed via $\chi^2$ tests or Student’s $t$ tests as appropriate. Continuous variables all met normality assumptions. The descriptive characteristics using the 3-level categorization clarified some important within-SHCN group demographic differences (eg, caregiver employment, age, and race and/or ethnicity). Also, given SSI requirements, the group receiving SSI represented a combination of higher developmental and economic risk and need for intervention,15 and for these reasons, primary multivariable analyses used the 3-level categorization.

We conducted multivariable logistic regressions, adjusted for demographics (site; caregiver age, US birth, race and/or ethnicity, educational attainment, marital or partnered status, and employment status; child’s age, sex, and public or private health insurance; and number of children in the household), comparing associations between the SHCN predictor and housing instability circumstances. Children without SHCNs were the referent group. We then compared associations between exposure groups (no SHCNs, SHCNs and no SSI, and SHCNs and receiving SSI) and housing instability circumstances.

Publicly financed housing or rental assistance (eg, Section 8 or Housing Choice program vouchers, public housing, or other rental assistance) and energy assistance (LIHEAP) may help families with low income meet housing-related needs.12,22 To determine if receipt of housing assistance and/or LIHEAP attenuated the association between SHCNs and housing instability, a combined housing assistance–LIHEAP variable was added to the adjusted models.

In all models, we reported adjusted odds ratios (aORs) and 95% confidence intervals (CIs). Analyses used 2-sided tests and SAS software (version 9.4; SAS Institute, Inc, Cary, NC). Significance was set at $P < .05$.

RESULTS
Of the sample of 14 188 participants (Table 1), 80.4% of children did not have SHCNs, 15.5% had SHCNs and no SSI, and 4.1% had SHCNs and were receiving SSI. The 3 most prevalent medical conditions among SHCNs were asthma (46.4%), speech and/or language problems (20.8%), and developmental delay (18.2%). Children’s mean age was 19.6 months (SD = 14); 46% were girls. Most caregivers (91.1%) were birth mothers; 5.7% were fathers and 3.2% were other (ie, adoptive or foster parent or grandparent). Caregivers’ mean age was 27.8 years (SD = 6.1); 74.7% were born in the United States, 46.5% were African American and non-Hispanic, 33.6% were Hispanic, 16.2% were white, 29.8% were married or partnered, and 48.0% employed. Housing assistance was reported by 17.8% of participants, and LIHEAP was reported by 19.2%. Being behind on rent or mortgage was reported by 20.6%, multiple moves were reported by 4.7%, and homelessness was reported by 8.0%. Families of children with (regardless of SSI receipt) versus without SHCNs were significantly ($P < .001$) more likely to report each of the adverse housing-instability circumstances: behind on rent or mortgage (24.1% vs 19.7%), ≥2 moves in the past year (6.2% vs 4.3%), and lifetime homelessness (9.9% vs 7.5%).

Bivariate characteristic differences by 3-level SHCN stratification (Table 1) included interview site, caregiver characteristics (US born, age, race and/or ethnicity, education, married or partner status, and employment status), child characteristics (age, sex, and health insurance), and household characteristics (number of other children and receipt of housing assistance and LIHEAP). As expected, rates of children with SHCNs and receiving SSI were highest in the Little Rock site, the only tertiary hospital in Arkansas serving children with chronic and subspecialty care needs.

In bivariate analyses, each of the adverse housing circumstances differed by SHCN status ($P = .001$; Table 2), with the highest prevalence

<p>| TABLE 2 Bivariate Outcomes, Adverse Housing Circumstances for 3 Family Groups: Children Without SHCNs, With SHCNs Not Receiving Child SSI, and SHCNs Receiving Child SSI |
|-----------------|------------------|------------------|------------------|------------------|</p>
<table>
<thead>
<tr>
<th>Outcome</th>
<th>Overall, n (%)</th>
<th>Children Without SHCNs, n (%)</th>
<th>Children With SHCNs, n (%)</th>
<th>$P^*$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behind on rent or mortgage in past y</td>
<td>2811 (20.6)</td>
<td>2167 (19.7)</td>
<td>516 (24.5)</td>
<td>128 (22.7)</td>
</tr>
<tr>
<td>≥2 moves in past y</td>
<td>658 (4.7)</td>
<td>487 (4.3)</td>
<td>148 (8.0)</td>
<td>24 (4.1)</td>
</tr>
<tr>
<td>Homeless during child’s lifetime</td>
<td>1122 (8.0)</td>
<td>850 (7.5)</td>
<td>227 (10.4)</td>
<td>45 (7.7)</td>
</tr>
<tr>
<td>≥1 adverse housing circumstance</td>
<td>3981 (28.4)</td>
<td>3084 (27.1)</td>
<td>750 (34.8)</td>
<td>177 (30.4)</td>
</tr>
</tbody>
</table>

$^*$ P value represents 3-group $\chi^2$ comparison.
seen among children with SHCNs and not receiving SSI.

Table 3 compares housing instability circumstances in households of children with and without SHCNs (2 group comparison, regardless of SSI receipt). Controlling for sample characteristics, households of children with SHCNs had significantly greater odds of being behind on rent or mortgage (aOR 1.27 [95% CI 1.14–1.41]; \( P < .001 \)) and homelessness during the child’s lifetime (aOR 1.39 [95% CI 1.18–1.65]; \( P < .001 \)). The odds of experiencing multiple moves were nonsignificant (aOR 1.22 [95% CI 1.00–1.48]; \( P = .05 \)). With the addition of housing assistance and/or LIHEAP as a covariate to the analyses, odds of housing instability circumstances did not substantially change.

Table 4 compares housing instability circumstances in households of children with SHCNs and no SSI and those with SHCNs and receiving SSI to households with children without SHCNs. Controlling for sample characteristics, children with SHCNs and no SSI had significantly greater odds of each of the 3 housing instability circumstances: behind on rent or mortgage (aOR 1.28 [95% CI 1.14–1.44]; \( P < .001 \)), multiple moves (aOR 1.29 [95% CI 1.05–1.59]; \( P = .01 \)), and ever homeless (aOR 1.44 [95% CI 1.20–1.72]; \( P < .001 \)). There were no substantial changes with the addition of housing subsidies and LIHEAP. Households of children with SHCNs and receiving SSI were not significantly different from households of children without SHCNs in the circumstances of being behind on rent or mortgage, experiencing multiple moves, or ever being homeless. The addition of housing assistance and LIHEAP as a covariate to the analyses did not substantially change the odds of any of the 3 housing instability circumstances.

DISCUSSION

This study identified that families of children <48 months old with SHCNs are more likely to report 2 circumstances of housing instability than families of children without SHCNs: behind on rent or mortgage and homelessness during the child’s lifetime. The third indicator of housing instability, multiple moves, was nonsignificant and the least prevalent across groups at 4.7%. By including SSI status in the SHCN stratification, we found that compared with families of children without SHCNs, families of children with SHCNs and no SSI had significantly increased odds of experiencing all 3 adverse circumstances of housing instability. The likely explanation is that regardless of the reason for SSI nonreceipt, families of children with SHCNs and no SSI still may have had medical and/or educational expenses that financially hinder their housing stability. Compared with families without SHCNs, families of children with SHCNs and receiving SSI did not experience greater housing instability. This finding is particularly noteworthy given that children with SHCNs receiving SSI are more likely than those with SHCNs and no SSI to have severe disabilities, increased needs for early intervention and multiple medical and developmental interventions, and higher financial pressures as documented by meeting federal disability criteria and statutory financial and asset limitations. Our results extend previous findings on housing instability among children with disabilities by focusing on young children (<48 months old), using a broad definition of children with SHCNs, rather than disabilities, and 3 adverse circumstances of housing instability. Using the Children With Special Health Care Needs Screener, we increased our understanding of the needs of young children at risk for long-term medical conditions who may not have received a diagnosis at these early ages, although families may be incurring increased medical and/or educational expenses. Young children, often excluded from or underrepresented within national studies, may differ from older cohorts as their symptoms either abate or intensify. For example, a child with beginning signs of autism spectrum disorder or developmental delay may not qualify for SSI at 4 years old but may qualify at school age.

Early childhood is a developmentally sensitive period in which contextual stresses and environmental instabilities could particularly jeopardize children’s current and future health and well-being. Disruptions of routine may result from multiple moves and homelessness, threatening the stability of day care, medical home, and other medical and educational services.
services and resources. For children with SHCNs, disruptions may mean service gaps or changes in clinical interventions, including early intervention, resulting in being lost to follow-up and detrimental access to care effects. Each of the adverse circumstances of housing instability examined also negatively affects parental supports and increases parental stresses and depression, all of which are known to negatively affect parent-child relationships and child well-being.

Access to both housing assistance and LIHEAP are limited nationally. Only 1 in 4 renters who are eligible for assistance receives federal housing assistance. Already inadequate, LIHEAP benefit availability is further limited by “first come, first served” distribution to eligible households. In each SHCN group, there were important gaps between families reporting ≥1 adverse housing circumstance and families receiving housing assistance or LIHEAP. For example, in the SHCNs-receiving-SSI group, 30.4% reported ≥1 adverse housing circumstance, whereas only 16.1% received housing assistance. Statistical control for receipt of housing assistance and/or LIHEAP did not substantially change the odds of housing instability. However, housing and/or LIHEAP assistance receipt possibly benefited families in ways not measured in this study, such as housing quality and consistent household utilities, both of which are related to health. Additionally, because families with low income may need to trade-off allocating financial resources among basic needs, future studies of households with children with SHCNs should evaluate if housing assistance and/or LIHEAP receipt decreases trade-offs among other basic needs.

This study has methodologic limitations. Cross-sectional analyses do not capture dynamic household changes over time or evaluate causality. Homelessness was reported within the child’s lifetime, whereas other variables were current (eg, SSI and housing assistance and/or LIHEAP) or occurred in the past year (eg, behind on rent and multiple moves). Most study variables were caregiver reported and therefore could be influenced by reporting bias and shared method variance. There may be unmeasured household confounders, including possibilities of other children with SHCNs or other household members receiving SSI. Although we assumed that children with SHCNs and receiving SSI had severe conditions and associated expenses, children’s medical and educational expenses vary and were not measured. In addition, SSI receipt associated with diagnoses, family finances, and SSI review changes across time. Our data are sentinel, not nationally representative, but reflect low-income households from 5 urban medical centers in different states primarily serving families using public health insurance. Our data do show an incidence of SHCNs similar to reports in 2009 and 2010, wherein 23.1% of US children <5 years old with SHCNs lived below 200% of the federal poverty level.

This study has important public health implications. Families of children with SHCNs are more likely to experience housing instability than similar families with children without SHCNs. Housing instability, particularly being behind on rent or mortgage or moving twice or more in 1 year, may not be as apparent to health care and social service providers as homelessness. Therefore, our results suggest that agencies serving children with SHCNs ask all 3 housing instability screening questions and provide intervention referrals as needed. In addition, our results suggest that clinicians provide SSI information to parents of children with SHCNs who may be eligible for SSI.

Our study adds to the body of evidence that the SSI program provides critical support in meeting basic needs to families of children with SHCNs and should thus be maintained and strengthened. Potential improvements to SSI that would further increase family

| TABLE 4 Associations Between Family Groups Based on SHCNs and Adverse Housing Instability Circumstances, 3-Group Comparisons: Families of Children Without SHCNs, With SHCNs Not Receiving Child SSI, and With SHCNs Receiving SSI |
|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Adjusted for Sample Characteristics | Adjusted for Sample Characteristics and Housing Subsidies and/or LIHEAP | Adjusted for Sample Characteristics | Adjusted for Sample Characteristics and Housing Subsidies and/or LIHEAP | Adjusted for Sample Characteristics | Adjusted for Sample Characteristics and Housing Subsidies and/or LIHEAP |
| **aOR (95% CI)** | **P** | **aOR (95% CI)** | **P** | **aOR (95% CI)** | **P** | **aOR (95% CI)** | **P** |
| Behind on rent or mortgage | 1.28 (1.14–1.44) | <.001 | 1.26 (1.11–1.42) | <.001 | 1.22 (0.98–1.51) | .07 | 1.15 (0.93–1.43) | .21 |
| Multiple moves | 1.29 (1.05–1.59) | .01 | 1.26 (1.01–1.58) | .04 | 0.90 (0.58–1.59) | .62 | 0.93 (0.60–1.44) | .73 |
| Ever homeless in child’s lifetime | 1.44 (1.20–1.72) | <.001 | 1.52 (1.26–1.83) | <.001 | 1.20 (0.84–1.72) | .31 | 1.27 (0.88–1.84) | .19 |

Referent group is families of children without SHCNs.

- **a** Adjusted for site; caregiver age, US birth, ethnicity, educational attainment, marital status, and employment; child sex, age, and health insurance; and number of children in the household.
- **b** Adjusted for site; caregiver age, US birth, ethnicity, educational attainment, marital status, and employment; child sex, age, and health insurance; number of children in the household; and housing assistance and/or LIHEAP.
resources needed to maintain housing stability may include (1) raising the income limit, indexing it to inflation so families are able to maintain at least partial work and earn wages necessary to better afford stable housing; (2) increasing asset limits so that families can save for unexpected expenses that might otherwise destabilize the family’s housing; and (3) increasing availability to families of flexible funds for emergency stabilization and eviction prevention as strategies for preventing homelessness, especially for children with SHCNs.

Most US communities lack enough safe and affordable homes, increasing strain on families, particularly families with children with SHCNs.24,30,33 Policies that incentivize additional production of housing for families with low income and increased assistance for market-rate housing costs might improve families’ housing stability and the health and well-being of all children.35

CONCLUSIONS
Families of children with SHCNs are more likely to experience housing instability than families of children without SHCNs. SSI may help protect families of children with SHCNs from all 3 adverse circumstances of housing instability: behind on rent, multiple moves, and homelessness. Protecting families with children from housing instability is an important investment in the health and well-being of all families, particularly families of children with SHCNs, and should be a public policy priority.

ABBREVIATIONS
aOR: adjusted odds ratio
CI: confidence interval
LIHEAP: Low Income Home Energy Assistance Program
SHCN: special health care need
SSI: Supplemental Security Income

Dr Heeren helped conceptualize and design the study, provided statistical expertise, and critically reviewed and revised the manuscript; Ms Bovell-Ammon helped supervise data collection at the Boston site and assisted in drafting and revising the manuscript; and all authors approved the final manuscript as submitted and agree to be accountable for all aspects of the work.

DOI: https://doi.org/10.1542/peds.2018-1704

Accepted for publication May 1, 2019

Address correspondence to Ruth Rose-Jacobs, ScD, Department of Pediatrics, Boston University School of Medicine, Boston Medical Center, 771 Albany St, Dowling Building G509, Boston, MA 02118. E-mail: rrosegac@bu.edu

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

Copyright © 2019 by the American Academy of Pediatrics

FINANCIAL DISCLOSURE: The authors have indicated they have no financial relationships relevant to this article to disclose.

FUNDING: Funded by the John W. Alden Trust, The Kresge Foundation, and multiple individual and foundation supporters. The full listing is available at childrenshealthwatch.org.

POTENTIAL CONFLICT OF INTEREST: Dr Sandel holds an unpaid position on the board of Enterprise Community Partners, a national housing organization; the other authors have indicated they have no potential conflicts of interest to disclose.

REFERENCES


8. Waldman HB, Perlman SP, Rader R. Hardships of raising children with...


13. Basic definition of disability for children, 20 CFR § 416.906


Housing Instability Among Families With Young Children With Special Health Care Needs
Ruth Rose-Jacobs, Stephanie Ettinger de Cuba, Allison Bovell-Ammon, Maureen M. Black, Sharon M. Coleman, Diana Cutts, Mariana Chilton, Timothy Heeren, Patrick Casey, Eduardo Ochoa, Deborah A. Frank and Megan Sandel

*Pediatrics* originally published online July 10, 2019;

Updated Information & Services
including high resolution figures, can be found at:
http://pediatrics.aappublications.org/content/early/2019/07/08/peds.2018-1704

References
This article cites 26 articles, 5 of which you can access for free at:
http://pediatrics.aappublications.org/content/early/2019/07/08/peds.2018-1704#BIBL

Subspecialty Collections
This article, along with others on similar topics, appears in the following collection(s):
Children With Special Health Care Needs
http://www.aappublications.org/cgi/collection/disabilities_sub
Public Health
http://www.aappublications.org/cgi/collection/public_health_sub

Permissions & Licensing
Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at:
http://www.aappublications.org/site/misc/Permissions.xhtml

Reprints
Information about ordering reprints can be found online:
http://www.aappublications.org/site/misc/reprints.xhtml
Housing Instability Among Families With Young Children With Special Health Care Needs
Ruth Rose-Jacobs, Stephanie Ettinger de Cuba, Allison Bovell-Ammon, Maureen M. Black, Sharon M. Coleman, Diana Cutts, Mariana Chilton, Timothy Heeren, Patrick Casey, Eduardo Ochoa, Deborah A. Frank and Megan Sandel

Pediatrics originally published online July 10, 2019;

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://pediatrics.aappublications.org/content/early/2019/07/08/peds.2018-1704

Pediatrics is the official journal of the American Academy of Pediatrics. A monthly publication, it has been published continuously since 1948. Pediatrics is owned, published, and trademarked by the American Academy of Pediatrics, 141 Northwest Point Boulevard, Elk Grove Village, Illinois, 60007. Copyright © 2019 by the American Academy of Pediatrics. All rights reserved. Print ISSN: 1073-0397.