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Public housing agency preferences for the homeless as a policy lever: Examining county-level housing subsidy receipt and maltreatment rates

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Abstract

This study examines the relationship between county Public Housing Agency (PHA) practices that prioritize families experiencing homelessness and county-level child maltreatment rates. Using data from a survey of PHAs and the National Child Abuse and Neglect Data System (NCANDS) with a sample of 534 counties, we find that policies which give preference to homeless households for housing assistance are associated with reduced victimization and substantiation rates, while policies that reduce barriers to assistance eligibility are associated with reporting rates. Our findings suggest that beyond prioritizing homeless families for housing assistance as a means of ending homelessness, providing families with more expedient access to a valuable public subsidy may have important positive externalities, such as reduced CPS involvement. Additional partnerships between child welfare agencies and housing providers, particularly those that provide housing subsidies, may be worthy of additional investment and evaluation.

Keywords

Child welfare; Maltreatment; Housing; Homelessness; Public housing; Policy

1. Introduction

There is evidence of substantial overlap among families involved with Child Protective Services (CPS) and those who are housing-insecure (Barth, Wildfire, & Green, 2006; Courtney, McMurtry, & Zinn, 2004; Cowal, Shinn, Weitzman, Stojanovic, & Labay, 2002; Park, Metraux, Broadbar, & Culhane, 2004). Among children in families who entered the New York City emergency shelter system for the first time in 1996, one-fourth of children

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had prior CPS involvement, including out-of-home placement and service receipt (Park et al., 2004). Recent evidence from randomized evaluations of programs that provide a housing subsidy to dually-involved families demonstrate that housing subsidy receipt is a powerful intervention by improving outcomes for families receiving a permanent housing subsidy relative to families receiving other types of services, and at a lower cost (Gubits et al., 2015). A recent report for the Family Options Study, which provided housing subsidies to homeless families assigned to the experimental group in 12 communities, concluded that initial results show “striking evidence of the power of offering a permanent subsidy to a homeless family” (Gubits et al., 2015, p. iv). Evidence suggests that for many families, a subsidy that stabilizes them in an affordable home may be the most cost effective treatment, while some families are likely to require supportive services in addition to a subsidy to address multiple issues that have resulted in CPS involvement (Tapper, 2010).

Homeless families who have received a housing subsidy through programs such as the Family Options Study were able to bypass often length waiting lists and receive priority for a housing subsidy. But for many homeless families, voucher receipt is extremely difficult, as federal housing subsidies are a scarce benefit received by approximately 1 in 4 eligible households (Steffen et al., 2015). These subsidies, most typically granted via a public housing unit or voucher from the Housing Choice Voucher (HCV) Program, require assisted households to pay 30% of their monthly rent, the remainder of which is paid by the local public housing agency (PHA). However, some families experiencing homelessness, as well as some other designated vulnerable groups, may benefit from a system of preferences that some PHAs use to allocate vouchers. The U.S. Department of Housing and Urban Development (HUD) permits PHAs to give preferences to households experiencing these types of housing hardships. Within communities where such a preference system is used, maltreatment rates may be reduced if the housing subsidy reduces maltreatment risk by addressing a family problem that may contribute to maltreatment or create barriers to family reunification.

Preference systems are primarily enacted at the county level presenting an opportunity to investigate whether counties that use a preference system for families most highly at risk for CPS involvement may have lower maltreatment rates. Using a unique dataset that combines PHA survey and child welfare administrative data, we examine whether a PHA preference for homeless households is associated with county-level maltreatment rates. Understanding whether PHA-level policies may decrease risk of CPS involvement is relevant for policy and practice, particularly in the context of the growing emphasis on housing-child welfare partnerships.

1.1. PHAs and priority preferences

PHAs, which typically serve a city or county, administer several types of subsidized housing programs, including public housing, HCVs, and project-based multi-family housing. The size of an agency’s housing portfolio varies considerably; nearly 90% of PHAs manage fewer than 500 units, while a few PHAs in large urban areas, such as New York City, hold a significant portion of the nation’s public housing stock (Schwartz, 2010). Federal rent assistance is not an entitlement program and demand far exceeds availability. While recent

data on waiting lists nationally is not publicly available, waiting lists are thought to exceed several years in many high-cost urban areas, though wait times vary considerably. Among households receiving housing assistance in 2013 nationally, those living in public housing had spent an average of 13 months on a waiting list, and Housing Choice Voucher recipients had waited an average of 23 months (U.S. Department of Housing and Urban Development, 2013b). Many PHAs only periodically open their waiting list for new applicants, so that households in need of assistance in some jurisdictions are rarely able to apply. In cities where a waiting list is closed, PHAs may accept applications only from households who fall into its designated preference groups (Dunton, Henry, Kean, & Khadduri, 2014).

Prior to 1998, PHAs were required to use a set of preferences for public housing favoring households that had been involuntarily displaced, lived in substandard housing (including living in a homeless shelter or experiencing homelessness), and who spent > 50% of their income on housing costs (i.e., severely cost burdened). These preferences required PHAs to move applicants meeting the criteria to the top of the waiting list for all forms of housing assistance. In 1998, the Quality Housing and Work Responsibility Act repealed the mandate requiring the use of preferences. Currently, HUD permits PHAs to voluntarily develop agency-level preferences that address needs and reflect priorities within the local housing environment, and can limit the number of applicants served under these various preferences (Hunt, Schulhof, & Holmquist, 1998). However, as stated in HUD's PHA handbook, "[p] references do not guarantee admission. Rather, they establish the order of placement on the waiting list" (U.S. Department of Housing and Urban Development, 2003, p. 33). Local preferences specify groups that may receive waiting list priority, conditioned on factors such as income eligibility, creditworthiness, and availability of an appropriate unit.

1.2. Homelessness and child maltreatment

There is little literature examining county-level maltreatment rates, particularly how the prevalence of maltreatment may be influenced by a particular policy operating at the city or county level. However, the few existing studies of county-level characteristics and maltreatment rates are useful for considering contextual factors that are likely to be associated with maltreatment rates as well as a PHA's likelihood of employing a preference system. A study of 16 California counties found that increases in unemployment and female-headed households were associated with increased maltreatment report rates, particularly among urban counties (Albert & Barth, 1996). In a more recent study of the prevalence of maltreatment in Pennsylvania counties pre- and post-Recession, the authors similarly reported that economic factors such as unemployment and foreclosure rates are associated with increases in reports and substantiated cases of maltreatment (Frioux et al., 2014). While individual-level economic and housing stress may increase maltreatment risk, so may county-level indicators of economic hardship. A PHA's chosen system for allocating vouchers is also likely to be related local economic conditions to the extent that demand for housing assistance reflects these conditions. Thus, we argue that just as individual housing voucher receipt may reduce maltreatment by reducing stress, county-level policies that provide housing assistance to particularly economically stressed families may also result in a reduction in the prevalence of maltreatment.

There are multiple reasons to suggest why a housing subsidy, when received more expediently through a preference system, may benefit homeless families and reduce maltreatment risk. At the individual level, housing subsidy receipt may reduce maltreatment risk through three potential pathways. First, it may reduce maltreatment risk by directly addressing housing-related neglect. While conditions of poverty alone do not constitute maltreatment statutorily, material hardships that can result from poverty, particularly problems such as inadequate or substandard housing, may lead to health or safety hazards for children that constitute child neglect (Pelton, 2015). This is consistent with recent findings from Font and Warren (2013), who found that in a nationally representative sample, families who had experienced homelessness in the last 12 months were more likely to be investigated for neglect than adequately-housed families.

Second, housing subsidy receipt may reduce parental stress associated with lack of stable housing and the financial hardships that typically accompany an episode of homelessness. Several studies examining the relation between poverty and harsh parenting behaviors have found that the association is mediated by parents' perception of the family's economic situation (Mistry, Vandewater, Huston, & McLoyd, 2002) as well as the presence of parental stress and depression (Newland, Crnic, Cox, & Mills-Koonce, 2013). Housing-related poverty may also uniquely contribute to parental distress and maltreatment risk, net of the general effect of income poverty. Using a sample of low-income urban families, Warren and Font (2015) reported that controlling for income and material hardship, homelessness and housing insecurity are positively associated with the risk of abuse and neglect. Thus, maltreatment risk may be reduced if the environmental and parental stresses that often accompany experiences of poverty are effectively addressed.

Third, placing homeless families into a stable housing unit removes them from the scrutiny of the emergency shelter system. Families living in emergency homeless shelters may experience a higher degree of scrutiny of their parenting behaviors compared to privately housed families. This "fishbowl effect" (Park et al., 2004) suggests that potentially problematic parenting behaviors that are unobserved in a private home environment may be observed by emergency shelter workers, case managers, or other bureaucratic actors who are mandated to report any concerns to CPS. Park et al. (2004) find some support for this hypothesis among their sample of families with a first entry into the emergency shelter in New York City, as longer stays in a shelter were associated with an increased probability of CPS involvement. However, it is also possible that increased CPS involvement is due, at least in part, to reactions to stress. Living in an emergency family homeless shelter is a highly stressful experience for families and may involve disruptions in important connections to non-custodial fathers and other social supports, which may increase risk of maltreatment (Marra et al., 2009; Paquette & Bassuk, 2009).

A variety of mechanisms may explain the benefits of housing subsidy receipt for a family experiencing homelessness, and recent evaluations of housing interventions for homeless or CPS-involved families provide evidence to support each of these potential pathways. Evaluators of the Family Options Study, which randomly assigned homeless families to several housing interventions, found that families who received a permanent housing subsidy were less likely than families who received standard emergency shelter services to have had

a child in foster care within the past six months at the 18-month follow-up (Cunningham, Pergamit, Baum, & Luna, 2015; Gubits et al., 2015). Families who received a permanent housing subsidy also experienced greater gains in housing stability, with reduced risk of having experienced homelessness or an emergency shelter stay in the past 6 months. Finally, parents of families in the permanent subsidy group reported lower levels of psychological and economic stress than parents who received standard services. Results from the Family Options Study provide important evidence that a housing subsidy may decrease parental stress, reduce risk of future housing instability that may contribute to neglect, and reduce future CPS involvement.

More limited evidence of the value of a housing subsidy to reduce maltreatment risk comes from the Family Unification Program, a joint program from HUD and child welfare agencies that provides housing subsidies to CPS-involved families for whom inadequate housing has been identified as a primary factor in substantiation and out-of-home placement. Results from the San Diego and Portland sites show that families receiving a FUP voucher were less likely to be re-reported to CPS than other families, but other outcomes such as reduced days to reunification or reduced likelihood of a substantiated re-report to CPS were not significant or inconsistent across sites (Pergamit, Cunningham, & Hanson, 2017). Several factors may contribute to the program's modest impact estimates, including implementation issues in appropriately targeting families (Cunningham et al., 2015), lack of an experimental design, and the relatively small number of vouchers issued by the program. Further, because the program targets families already involved with CPS, these families tend to have more severe and chronic maltreatment risks than the average low-income family, or even the average family reported to CPS. Nevertheless, results from FUP suggest that a housing subsidy receipt may reduce future involvement with CPS via one or more pathways described above.

1.3. Current study

The goal of the current study is to examine whether county-level PHA policies that give preference to families experiencing homelessness have lower rates of maltreatment than counties whose PHAs do not employ this particular practice. Housing subsidies may reduce maltreatment by addressing economic stress or reducing time that families spend in emergency shelters, and we account for these pathways by controlling for county-level economic indicators and homeless shelter bed inventories. There may also be a more direct association in which housing assistance eliminates a form of extreme housing insecurity that may bring families to the attention of CPS. We expect that holding constant the local economic, housing, and child welfare agency environment, counties in which the PHA gives preferences to families experiencing homelessness will have lower rates of maltreatment reporting and substantiation.

2. Method

2.1. Data

We draw on a dataset constructed from several sources to examine county-level PHA preferences and child maltreatment rates across counties in the U.S. We use data from the 2012 US Department of Housing and Urban Development (HUD) Engagement with

Homeless Households Study to capture PHA level priority preferences. HUD, as part of its Engagement with Homeless Households Study, surveyed all (nearly 4000) PHAs in the US using a county-level administered survey. Of these PHAs, 3210 (80%) responded to the survey, and the respondents are representative of PHAs nationally. Approximately 85% of all housing units supported by PHAs are represented in the survey (Dunton et al., 2014).

To arrive at our county sample, we merge the Engagement with Homeless Households Study data with the 2013 National Child and Neglect Data Systems (NCANDS) data to capture maltreatment rates. NCANDS includes the record of each child maltreatment investigation in states submitting data. In the 2013 file, forty-five states and the District of Columbia submitted data.¹ NCANDS identifies child location by both state and by county. Child anonymity is protected by including each child's county location only if there are 1000 or more investigation records in any given county. In 2013, the study year, this results in 660 counties. NCANDS includes the child's age, risk factors, and case disposition, which indicates whether CPS substantiated the maltreatment. After merging these county data with counties who responded to the PHA survey as well as those counties with maltreatment data within the 2011 NCANDS file, we arrive at a sample of 534² counties. In Fig. 1, we show the geographic distribution of counties included in our final sample. We append county level covariates from the 2013 American Community Survey (ACS) and HUD.

2.2. Measures

2.2.1. Maltreatment rates—Our dependent variables are constructed using the NCANDS data. To measure each county's 2013 maltreatment substantiation rate, we construct three measures of maltreatment. First, we capture the victimization rate as a ratio of all substantiations to the total child population. Second, we use a ratio of substantiations to the total number of investigated reports, referred to as the substantiation rate. Previous literature has included the substantiation rate in addition to other findings of victimization (Fluke, Yuan, & Edwards, 1999). Second, we use a ratio of the total number of investigated reports to the total child population in the county, referred to as the report rate. Prior research with NCANDS data has used both the substantiation and report rate to examine aggregated state-level data (Paxson & Waldfogel, 2002; Paxson & Waldfogel, 2003). We use these measures because definitions of maltreatment may vary by county or state in ways that differentially impact the substantiation and reporting rates. For ease of interpretation, all rates are multiplied by 1000. Consistent with prior research using maltreatment measures, we use the logged form of these rates in all analyses due to their kurtotic distribution. However, we show the natural units of these rates in our descriptive tables.

2.2.2. PHA preferences—The survey asks PHAs whether they provide homeless households with a limited or more general preference for both HCV and public housing assistance, and whether they rank homeless households above or below other categories of groups to which they may give priority. Based on these questions, we use a dichotomous variable indicating that the PHA gives some type of priority to homeless households. This

¹Idaho, Maryland, North Carolina, Ohio, Oklahoma, and Virginia did not submit data for 2013.

²We exclude one county outlier from the sample with extremely high levels of maltreatment that may be due to reporting error.

may include a general preference for homeless households, allotting a certain number of waiting list slots for homeless households, or ranking homeless households above other groups who are given preference for housing. In addition to our use of *homeless preference*, we also used a measure of *modified screening* that indicates whether the PHA modifies screening criteria for homeless applicants. The PHA was asked, “Has your PHA modified or made exceptions to tenant screening or other policies in order to provide housing assistance to homeless households?” Modified screening criteria typically involves considering households with a criminal history, poor credit or rental history, which are common among households who have experienced an episode of homelessness (United States Interagency Council on Homelessness, n.d.). We examine modified screening criteria in addition to homeless preference as use of this practice is more common among PHAs of smaller sizes. While households receiving assistance as a result of modified screening may not receive assistance as quickly as those who benefit from a priority system, they are similarly likely to receive assistance when they otherwise would not. Some households may also benefit from both policies when they enter housing assistance, though the proportion of PHAs who use both types of policies for the same type of housing assistance is relatively small (Dunton et al., 2014).

2.2.3. Covariates

2.2.3.1. County variables.: We include county-level demographic covariates because families with lower income and education are more likely to experience homelessness than other families (Steffen et al., 2015), and families who are minority race and have lower income are more likely to be investigated or have a case substantiated by CPS (Drake, Lee, & Jonson-Reid, 2009; Wildeman et al., 2014). From the 2013 American Community Survey (ACS), we include the percentage of adults with at least a high school diploma, racial and ethnic composition, poverty rate, and county population (U.S. Census Bureau, 2013). Counties with higher levels of economic disadvantage are likely to have higher demand for housing assistance (Dunton et al., 2014) and are also likely to have higher levels of maltreatment rates (Albert & Barth, 1996; Freisthler & Weiss, 2008).

2.2.3.2. Housing market variables.: To account for local housing market conditions that may influence both a PHA’s use of preferences as well as maltreatment rates, we include the percentage of people living in households with four people, the percentage of homes that are owner occupied, and the rental vacancy rate from the ACS. We include the HUD-designated county-level fair market rent (in \$100 units) for a three-bedroom home to account for housing costs. Fair market rents are publicly available data via HUD’s website (U.S. Department of Housing and Urban Development, 2013a, 2013b) and are used to set payment standards for subsidized units and are the cost of renting a standard quality home, typically at the 40th percentile of the distribution of local rents. Including these housing characteristics controls for regional variation in the housing market that may confound associations between a PHA’s response to local housing needs through preferences and maltreatment rates. To account for the PHA environment and demand for rental assistance, we also include measures of the PHA’s total number of housing units and indicators of whether the PHA’s HCV and public housing waiting lists are currently open to the public or to preference groups (1 = no open waiting list, 2 = open waiting list, 3 = no housing units of

that type). Because we are interested in homeless households, we also want to account for the number of family emergency shelter beds. Families in shelter are more likely to be involved with CPS than a privately housed family so access to emergency shelters may increase the probability of CPS involvement. Communities are required to report the number of emergency shelter beds to HUD as a condition of funding; we use this information from HUD's 2013 Housing Inventory Count to construct a ratio of the number of emergency shelter family beds to the total family population per 1000 people.

2.3. Method

We proceed with our analysis of PHA preferences in two stages. First, we use independent sample *t*-tests and chi-square tests to examine bivariate relationships between counties with PHA preference policies and maltreatment rates. Second, we use OLS regression models to examine associations between county-level PHA policies and maltreatment rates. Using our three outcomes of victimization, report, and substantiation rates, we estimate their associations with two policy types: 1) any preference given to homeless households, 2) modified screening criteria for homeless households. We cluster robust standard errors at the state level to account for the ways in which county-level factors related to PHA policies and CPS practices may be correlated within states.

3. Results

Table 1 shows descriptive summary statistics for our full analytic sample. PHA preferences for homeless households are relatively uncommon in our sample, with 17% of PHAs reporting any preference for homeless households. Twelve percent reported using a modified screening criteria for homeless applicants. There is a great deal of variation in the prevalence of maltreatment across the three rate types. Across the sample, an average of 4 children per 1000 experienced a substantiated case of maltreatment. Counties averaged a substantiation rate of 21% of investigated children in 2013 (or 210 per 1000 children), so less than one-quarter of investigated reports are actually substantiated. However, the high standard deviation in the rate of substantiations (9%) shows that counties' efficiency of reporting differs widely geographically. The rate of investigated reports to the county child population varies much less substantially, with a mean rate of 19 investigations per every 1000 children.

County demographic, economic, and housing characteristics also reflect the diversity of counties in our sample. Counties range in size from 15,073 residents to over 10 million. Racial and ethnic composition varies widely, as does the incidence of poverty. The county mean homeownership rate is similar to the national average at 62%, with an average renter and owner vacancy rate of 12%. The mean FMR for a three bedroom is \$1127, though housing costs in the lowest-cost counties are nearly 40% less expensive. Counties have, on average, 2.4 family emergency shelter beds per 1000 people.

Next, we examine bivariate relationships between maltreatment rates and covariates with our PHA policies in Table 2. Counties where PHAs give preference to homeless households have a modestly lower average substantiation rate of 200 substantiated reports per 1000 reports, compared to 223 among other counties. The preference counties also have a slightly higher average fair market rent and a greater number of family emergency shelter beds,

suggesting a higher-cost housing environment. The average PHA size among preference counties is substantially larger, indicating that PHAs with greater inventory may be in a better position to use a preference-based system. On the other hand, different characteristics distinguish counties using modified screening criteria and those that do not. Modified screening counties have lower rates of reported maltreatment and have smaller county population size. They also have a lower proportion of people with a high school degree, a lower homeownership rate and higher incidence of poverty, suggesting that use of modified screening may be a response to a higher proportion of housing assistance applicants with characteristics such as poor credit or rental history. Importantly, use of modified screening does not appear to be correlated with PHA size, which indicates that PHAs with a variety of housing inventory use this practice.

Table 3 displays OLS models estimating the effect of PHA policies on maltreatment rates. We find that controlling for county and housing characteristics, preference for homeless households for housing assistance is associated with a 20% lower victimization rate. While the coefficient for the report rate is near zero and not significant, preference for homeless households is associated with a reduced substantiation rate of approximately 18%. These effect sizes are substantively meaningful given average maltreatment rates – for example, the average victimization rate among counties in the study is 4 substantiated cases per 1000 children, and a 20% reduction in this rate would result in a victimization rate of 3.2 substantiated cases per 1000 children. For the substantiation rate, an 18% reduction in the substantiation rate would result in a decrease from 200 substantiation cases per 1000 reports to 164. Higher rates of poverty are associated with higher rates of victimization and reports while the substantiation rate is not, which is consistent with the notion that poverty may increase risk of CPS involvement but should not itself lead to increased substantiation risk. Coefficients for PHA waitlists are somewhat inconsistent – an open waiting list for HCV is associated with a decreased rate of victimization, while an open waiting list for public housing is associated with an increased victimization and substantiation rate. These divergent results may be due to the different environments in which families with a Housing Choice Voucher and those in public housing reside. Subsidy recipients residing in public housing may not experience reduced exposure to mandated reporting, as there may be higher police presence at public housing buildings than in other neighborhoods (Mazerolle, Ready, Terrill, & Waring, 2000).

While a preference policy for homeless households appears to be associated with a decrease in substantiation rates, use of modified screening criteria is associated with a decrease in the reporting rate of approximately 14%. This effect size is also meaningful, as it represents a decrease in maltreatment reports per 1000 children from 19 reports to 16.4 reports. That modified screening is associated with reduced reporting rate rather than substantiation rates may be due in part to the fact that PHAs reported using modified screening more often for their HCV program than for public housing. If reporting rates are, to some degree, a function of surveillance, this may partially explain a reduction in the reporting rate among counties who use this policy. Covariates are of similar practical significance in these models as compared to those examining homeless preference, with two major exceptions. First, the availability of homeless shelter beds is associated with an increase in maltreatment rates, which is consistent with the “fishbowl effect” hypothesis that increased stays or duration of

stays in emergency shelter may increase one's risk of eventual CPS involvement. Second, open waitlists for HCV and public housing programs are not associated with maltreatment rates, with the exception that open public housing waitlists are again associated with an increased victimization rate.

4. Discussion

Inadequate housing is a common experience and risk factor among CPS-involved families. This analysis used a county-level policy related to housing assistance to examine its potential to address CPS involvement. This study sought to examine whether PHA policies, as a function of housing assistance availability and access, are associated with county-level maltreatment rates. Our results suggest that housing assistance policies that give preference to homeless households may result in decreased maltreatment rates, but only for select policies. Specifically, we find that having a preference for homeless households is associated with a decrease in the county victimization and substantiation rate, while use of modified screening criteria is associated with a decrease in the report rate. In our sample, a preference for homeless households is more likely to be used in higher-cost counties where the demand for housing assistance is greater, suggesting that local housing costs likely play an important role in a family's ability to find and maintain a stable home, and housing assistance may be particularly important in expensive housing markets.

While our findings suggest that county-level housing policy may be important for addressing maltreatment, additional research is needed to enhance our understanding of whether existing housing policies can indeed serve a preventative role. There may be other federal, state or local housing policies that prioritize inadequately housed families as a means of stabilizing at-risk families, and such policies should be rigorously evaluated for their potential effectiveness in this role. Additionally, our findings support the use of these preference policies, particularly in high cost cities with long waiting lists for housing assistance in which a subsidy is particularly highly valued. While PHA preferences are related to housing assistance receipt, it is unclear if they are predictive of them. That is, while we are able to identify PHAs with policies that preference inadequately housed applicants, we do not have information regarding how often these preferences are used in practice. The number of families who receive housing assistance via a preference or modified screening would be useful for further understanding the extent of this policy's usefulness.

Despite these research gaps, the survey used in this study indicates a policy and programmatic focus on homeless households among a non-trivial proportion of PHAs. This is not surprising given the federal policy goals of ending and preventing homelessness (UICH, 2010). Given that 2 out of every 5 people experiencing homelessness are part of a family (Henry, Cortes, Shivji, & Buck, 2014) and a significant proportion of homeless families are CPS-involved (Park et al., 2004), indications of priority preferences shown to homeless families on waiting lists for housing are likely a positive step towards stabilizing at-risk families. The usefulness of prioritizing homeless families for housing assistance is also supported by recent evidence that permanent housing subsidies increase residential stability and reduce risk of homelessness among formerly homeless families (Gubits et al.,

2015). These studies indicate that investments in housing assistance may prevent future homelessness, a known risk factor for CPS involvement, and are therefore likely a good use of resources.

5. Limitations

There are several limitations with these data that restrict our study methodologically as well as our ability to propose larger implications from our findings. First, due to our use of county-level aggregated data, we are unable to infer from our analyses that any individual-level receipt of housing assistance is associated with individual maltreatment risk. Instead, we are able to consider the ways in which preference systems used by PHAs reflect the local housing environment and demand for housing assistance. Second, because the survey of PHAs has only been conducted at one time point, we are unable to compare changes in maltreatment rates as a function of changes in PHA preferences over time. Such an analysis would reduce concerns regarding omitted variable bias as well as allow for controls of time-invariant factors related to the housing and economic environment in counties that may confound any association between PHA policies and maltreatment rates. While we control for many county-level characteristics that are likely confounders, we would ideally account for other county characteristics that may be the source of omitted variable bias, such as the size of the local homeless population. Thus, the cross-sectional nature of these data leaves a potential for omitted variable bias that does not allow us to make any causal claims regarding the relationship between PHA policies and maltreatment rates. Third, because preferences are relatively uncommon among counties matched to NCANDS data, we have limited statistical power in our models. Fourth, because our analytic sample only includes counties with > 1000 report records, we are unable to generalize to counties with PHAs not in our sample because they have lower rates of maltreatment. Finally, across counties, there is inconsistent application of substantiation decisions. Every state has a distinct statutory definition of child maltreatment, and many counties in our sample are in states in which child welfare is administered at the county level. Further, some states may have programs that divert families from investigations and substantiations to a differential response program. The many jurisdictions in our sample likely have different procedures and standards for screening in reports, investigations, and substantiation decisions. As a result, the substantiation ratio may not be directly comparable from one county to another. Because we cannot observe many of these child welfare system attributes, it is impossible for us to infer what degree of variation in child welfare outcomes are attributable to our dependent variables, and what is attributable to county variation.

6. Conclusions

In this study, we find some evidence to suggest that local housing policy levers may serve as a prevention mechanism for inadequately housed families at risk of CPS involvement by reducing county maltreatment rates. These findings are useful as PHAs are the gatekeeper of a very valuable benefit for low-income families, yet little is known about how agencies decide to allocate these benefits. Shedding light on this allocation process is valuable for understanding how vulnerable families are prioritized, especially in expensive housing markets where extreme housing insecurity is a more prevalent experience. Despite our

findings that preferences for homeless families may prevent maltreatment, preference systems such as those described in this study should be considered cautiously. Wide use of preferences for such a scarce and valuable benefit as a housing subsidy may incent families to become eligible for preference groups. However, O'Flaherty and Wu (2006) found that the New York City PHA's practice of giving preference to homeless families did not motivate any substantial number of families into the city shelter system though were associated with longer shelter stays. While concerns of any potential behavioral response to a housing assistance preference system are notable, there is limited research on this topic and such concerns should not outweigh the potentially stabilizing effect of housing assistance for at-risk families. Additional research is needed to examine the potential of other housing policies as a means of improving the well-being of low-income families and preventing future child maltreatment.

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Fig. 1.
Map indicating the location of all counties used In analytic sample ($N = 534$ counties).

Table 1Descriptive summary statistics for total sample ($N = 534$ counties).

	Mean/%	SD	Range
PHA policies			
Any preference for homeless households	16.8		0–1
Modified screening for homeless households	12.3		0–1
CPS characteristics			
Victimization rate	4.02	5.59	0.04–115.66
Substantiation rate	210.25	89.20	7.59–481.61
Report rate	19.19	22.69	1.35–495.07
County characteristics			
Fair market rent	1127.4	300.5	691–2701
% Four-person household	18.9		4.9–28.4
% Poverty	16.4		3.6–37.3
% Minority race	19.4		1.8–88.4
% Hispanic	11.8		0.0–9.5
% Disability	13.4		1.0–31.5
% High school degree	83.3		58.7–97.2
% Owner-occupied homes	67.8		19.4–90.2
% Vacant	12.6		3.6–57.0
County population	349,923	646,709	15,073–10,071,068
Family shelter emergency beds rate	2.4	3.4	0.7–19.8
PHA size (total units)	1990	1,5853	11–278,907
PHA public housing waitlist open	1.8	1.2	1–3
PHA HCV waitlist open	1.7	1.1	1–3

Table 2

Bivariate results of 2013 maltreatment rates and county characteristics by PHA policies.

	<u>Any preference for homeless households</u>		Sig.	<u>Modified screening for homeless households</u>		Sig.
	No %/SD	Yes %/SD		No %/SD	Yes %/SD	
Victimization rate	4.1 (5.9)	3.6 (3.0)		3.8 (3.2)	3.4 (1.9)	
Substantiation rate	222.7 (100.9)	200.9 (89.0)	*	210.3 (89.2)	235.1913.1)	
Report rate	19.3 (24.2)	18.6 (12.5)		18.5 (12.1)	15.2 (9.1)	***
Fair market rent	1120 (298)	1362 (310)	*	1125 (291)	1237 (284)	
% Four-person household	19.0 (2.4)	18.7 (2.7)		18.9 (2.5)	19.4 (2.3)	
% Poverty	16.4 (5.3)	16.6 (5.8)		16.1 (5.2)	18.3 (6.5)	**
% Minority race	18.9 (14.2)	21.7 (16.7)	*	19.4 (14.3)	21.6 (14.5)	
% Hispanic	11.9 (14.6)	11.0 (12.1)		11.7 (13.9)	13.2 (12.3)	
% Disability	13.4 (3.5)	13.2 (3.2)		13.3 (3.3)	12.8 (3.4)	
% High school degree	8.3 (6.1)	8.3 (6.1)		85.3 (4.8)	83.2 (3.3)	**
% Owner-occupied	68.0 (8.3)	66.7 (10.5)		68.1 (9.1)	64.5 (10.6)	*
% Vacant	12.6 (6.9)	12.4 (6.1)		12.5 (6.6)	11.9 (6.4)	
County population	350,203 (674,285)	348,540 (491,086)		360,876 (616,012)	337,061 (290,269)	*
Family shelter emergency beds rate	2.2 (3.2)	3.1 (4.3)	**	2.8 (3.9)	2.5 (3.9)	
PHA size (total units)	662 (1093)	4657 (27350)	***	1873 (16800)	1816 (5687)	
PHA public housing waitlist open	1.8 (1.1)	1.8 (1.6)		2.0 (0.8)	1.7 (0.8)	
PHA HCV waitlist open	1.1 (0.8)	2.2 (1.0)		2.0 (0.5)	2.1 (0.7)	

N = 534 counties.* $p < 0.05$.** $p < 0.01$.*** $p < 0.001$.

Table 3

OLS models estimating the effect of PHA policies on maltreatment rates.

	Victimization rate	Report rate	Substantiation rate	Victimization rate	Report rate	Substantiation rate
Homeless preference	– 0.213 [*] (0.119)	– 0.0305 (0.0555)	– 0.182 [*] (0.0985)			
Modified screening				0.00329 (0.130)	– 0.139 [*] (0.0818)	0.147 (0.0957)
Fair market rent	– 0.0384 [*] (0.0191)	– 0.0389 ^{***} (0.0117)	0.000512 (0.0186)	– 0.0490 ^{**} (0.0214)	– 0.0422 ^{***} (0.0116)	– 0.00814 (0.0207)
% Four-person household	– 0.604 (2.434)	– 0.348 (1.251)	– 0.255 (1.937)	– 0.270 (2.479)	– 1.091 (1.374)	0.793 (2.070)
% Poverty	3.470 ^{***} (1.143)	2.986 ^{***} (0.872)	0.483 (0.822)	2.920 ^{**} (1.194)	3.124 ^{***} (0.852)	– 0.204 (1.152)
% Minority	0.716 (0.475)	– 0.131 (0.273)	0.847 ^{**} (0.405)	0.934 (0.668)	– 0.0693 (0.296)	1.003 [*] (0.588)
% Hispanic	1.043 ^{**} (0.488)	0.0287 (0.260)	1.015 ^{**} (0.479)	1.357 [*] (0.693)	0.169 (0.447)	1.188 [*] (0.660)
% Disability	3.438 [*] (1.844)	3.355 ^{***} (1.095)	0.0827 (1.277)	3.700 [*] (1.977)	3.464 ^{***} (1.250)	0.237 (1.324)
% High school degree	0.896 (0.927)	– 0.322 (0.467)	1.218 (0.802)	1.092 (1.103)	– 0.139 (0.587)	1.230 (1.005)
% Owner occupied	– 0.411 (0.744)	– 0.752 [*] (0.446)	0.341 (0.658)	– 0.201 (0.891)	– 0.767 (0.533)	0.565 (0.732)
% Vacant	1.284 ^{**} (0.620)	0.920 [*] (0.503)	0.364 (0.401)	1.213 (0.886)	0.419 (0.590)	0.794 (0.684)
County population	– 0.298 ^{***} (0.0871)	– 0.222 ^{***} (0.0672)	– 0.0766 [*] (0.0433)	– 0.291 ^{***} (0.0970)	– 0.217 ^{***} (0.0669)	– 0.0748 (0.0608)
Shelter beds	0.117 (0.126)	0.0524 (0.0414)	0.0642 (0.0949)	0.177 ^{**} (0.0867)	0.0683 [*] (0.0380)	0.109 [*] (0.0642)
PHA size	0.0476 (0.0534)	0.0184 (0.0213)	0.0292 (0.0495)	0.0310 (0.0413)	0.0207 (0.0240)	0.0103 (0.0367)
HCV waitlist	– 0.0976 ^{**} (0.0462)	– 0.0440 (0.0372)	– 0.0536 (0.0343)	– 0.0938 (0.0653)	– 0.0436 (0.0496)	– 0.0502 (0.0503)
PH waitlist	0.134 ^{**} (0.0584)	0.0419 (0.0412)	0.0920 ^{**} (0.0448)	0.144 ^{**} (0.0686)	0.0567 (0.0501)	0.0869 (0.0568)
Constant	3.531 ^{**} (1.620)	6.046 ^{***} (1.093)	4.393 ^{***} (1.324)	3.061 [*] (1.682)	5.995 ^{***} (1.114)	3.973 ^{***} (1.380)

N = 534 counties.

Robust standard errors in parentheses, clustered at state level.

p < 0.01**
p < 0.05.*
p < 0.1.