

### RESEARCH BRIEF

## Homework Starts with Home: Effects of Minnesota's Initiative to Address Student Homelessness

### PURPOSE OF THE STUDY

*The purpose of this study was to evaluate the Homework Starts with Home pilot program by describing who was served by the program, how many years of support program participants received, and the effect of the program on use of shelters, school mobility, and school attendance.*

### BACKGROUND & PURPOSE

Homelessness among K-12 students is associated with profound risks to academic success, physical and mental health, and many other adverse outcomes (Bassuk et al., 2020; Buckner, 2008; Cutuli et al., 2013; Fantuzzo et al., 2012, 2014; Herbers et al., 2012; Manfra, 2019; Masten et al., 2014, 2015; Miller, 2011; Sulkowski, 2016). Further, student homelessness occurs at higher rates among Black, Indigenous, and Hispanic students in the United States, reflecting racism and inequities in housing, family supports, and educational opportunities (Bassuk et al., 2020; Shinn & Khadduri, 2020).

A major policy initiative in Minnesota to address student homelessness, Homework Starts with Home (HSWH), began in 2014 in response to the crisis of homelessness among school-aged students. HSWH funds community programs to provide rental assistance and related support to families with school-aged children at high risk of homelessness as a strategy for reducing student homelessness and fostering positive student outcomes.

The purpose of this study was to evaluate the HSWH pilot program by describing who was served by the program, how many years of support program participants received, and the effect of the program on use of shelters, school mobility, and school attendance. The following research questions guided this study:

1. *What is the profile of risk for students whose family participated in the HSWH pilot program? How does that risk profile compare to the population of Minnesota students?*
2. *How many years of support did families in the HSWH pilot program receive?*
3. *What is the effect of the HSWH pilot program on students' shelter stays?*
4. *What is the effect of the HSWH pilot program on school mobility and school attendance?*



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STUDENT HOMELESSNESS OCCURS AT HIGHER RATES AMONG BLACK, INDIGENOUS, AND HISPANIC STUDENTS IN THE UNITED STATES, REFLECTING RACISM AND INEQUITIES IN HOUSING, FAMILY SUPPORTS, AND EDUCATIONAL OPPORTUNITIES.

## METHODS

*We integrated data via Minn-LInK to test the effectiveness of the HSWH pilot program. We used propensity score matching to create a group of comparison students and then fit longitudinal mixed effects models to three outcomes: shelter stays, school moves, and school attendance. We also used descriptive analysis to characterize who was served by the program and how long they were in the program.*

Through Minn-LInK we integrated data from the Minnesota Departments of Education (MDE) and Human Services (DHS), Minnesota Housing Finance Agency (MHFA), Institute for Community Alliances (ICA), and Hennepin County. This integration allowed us to bring together students' educational records (Minnesota Automated Reporting Student System [MARSS], Minnesota Comprehensive Assessment [MCA], and Disciplinary Incident Reporting System [DIRS]), with data about their child protection and out-of-home care experiences (Social Services Information System [SSIS]), and their family's receipt of cash and food assistance (MAXIS), rental assistance (MHFA), and shelter and housing assistance (Homeless Management Information System [HMIS] and Hennepin County).

## Program Participants

The sample included 466 school-age children whose families received rental assistance from a participating organization during the pilot phase of HSWH. At program entry, 21% of participants were identified as long-term homeless, and 77% were classified as homeless (includes doubled-up). Participants received the rental assistance at one of three sites: two in the Twin Cities metro and one site in rural Minnesota. The HSWH pilot program comprised two cohorts of students, those whose families received rental assistance in 2014 and 2015, and those whose families received rental assistance in 2016 and 2017. See Table 1 for complete student demographic information by cohort.

**Table 1.**

Characteristics of HSWH Pilot Program Participants by Cohort		
	Cohort 1	Cohort 2
<b>Race and/or Ethnicity</b>		
American Indian	2%	4%
Asian American	1%	2%
Black or African American	83%	77%
Hispanic or Latino	6%	8%
White	7%	9%
<b>Sex (% Female)</b>	48%	47%
<b>English Language Learner</b>	5%	2%
<b>Receiving Special Education Services</b>	26%	25%
<b>Grade Level</b>		
PK-5	72%	75%
6-8	19%	16%
9-12	9%	9%

## FINDINGS

*The HSWH program reached students with very high levels of risk, including higher levels of homelessness, poverty, and school problems than a matched comparison group of peers. Shelter stays decreased for program recipients, significantly so for the second cohort of families. Student attendance and school mobility did not show improvements over the short term of the initial follow-up.*

## Research Design

To measure how risk factors differed between program participants and students located in similar schools, we constructed two pools of comparison students, one for each cohort from the same three HUD Continuum of Care regions as each of the respective program sites. To test the impact of the pilot program on student outcomes, we used propensity score matching to create a matched group of comparison students for each cohort separately. The same propensity score model was fit to both cohorts and included indicators of homelessness (e.g., number of nights spent in shelters), poverty (e.g., cash assistance, free and reduced lunch), race, and grade level.

## Data Analysis

To create a profile of risk for each student, we summed nine indicators of risk for each student. Data were restricted to the year before each family started the HSWH pilot program unless otherwise noted. Indicators of risk included one or more shelter stay, identified Homeless or Highly Mobile (HHM) by the schools, family received cash assistance, family received food stamps, eligible for free school lunch, school attendance below 90%, school moves greater than two, suspended, and had any lifetime involvement with child protection.

To test effects of the program, we fit longitudinal regression models to three outcomes separately: shelter stays, school moves, and school attendance. Analyses were conducted on each cohort separately and included three phases: Baseline (the two years prior to program start), Intervention (the two years that participants were in the program), and Follow-up (as many years as data were available post-intervention, up to three years).

### Research Question 1: Profiles of Risk

Our first goal was to describe the risk profile for students whose families participated in the HSWH pilot program. Data were restricted to the baseline phase. We hypothesized that students whose families would go on to participate in HSWH would display significantly greater risk than students in the comparison pools. As can be seen in Supplemental Table A, students in the HSWH pilot program displayed greater risk on all risk indicators than the comparison pool during the baseline period. Specifically, students in the HSWH pilot program had on average 4.2 (SD = 1.8) risk indicators during the baseline period while students in the comparison pool had on average 1.4 (SD = 1.6) risk indicators.

For example, regarding indicators of homeless or housing instability, students in the HSWH pilot program on average spent over 20 nights in a shelter during the baseline period, while students in the comparison pools on average spent less than one night in a shelter during the same period. Similarly, over 30% of students in the HSWH pilot program were already identified as homeless or highly mobile by the schools during the baseline period, while the same was true for less than 5% of the students in the comparison pools. Further, 95% students in the HSWH pilot program were eligible for free school lunch, compared to less than 50% in comparison pools.

Students in the HSWH pilot program also showed greater risk on school variables during the baseline period than students in comparison pools. For example, average attendance was below 90% for students in the program (an indicator of chronic absenteeism) and above 90% for students in the comparison pool. Students in the program were three to four times more likely to have been suspended than students in the comparison pools.

### Research Question 2: Program Duration

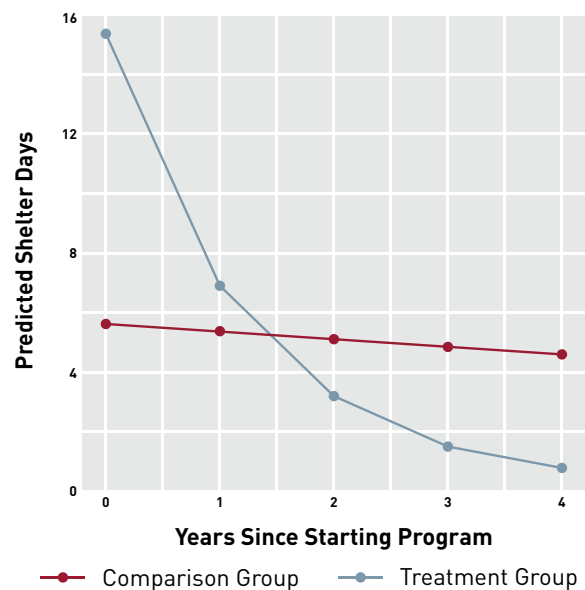
Next, we sought to characterize program implementation by analyzing how long families participated in the pilot program. The pilot program was initially designed to provide two years of rental assistance to eligible families. The number of days in the program ranged from 5 to 931. The mean number of days in the program was 594 (SD = 187), and the median number of days in the program was 709, indicating about half the families were in the program for two years or less and the other half participated for more than two years.

### Research Question 3: Program Effects on Shelter Stays

Based on our theory of change, student homelessness (number of nights spent in a shelter) was the most immediate outcome the program sought to affect. We tested the effect of the program on student homelessness for each cohort separately by fitting a longitudinal zero-inflated negative binomial mixed effects model to the shelter stays data. The results indicated that in Cohort 2, students in the program had a reduction in shelter use over time compared to students in the matched comparison group (see Figure 1 and Supplemental Table B). There was no effect of the program on shelter stays in Cohort 1.

Figure 1.

Predicted Shelter Days (Cohort 2)



### Research Question 4: Program Effects on School Mobility and School Attendance

The final research question addressed the effect of the HSWH pilot program on students' school mobility and school attendance. We fit a longitudinal Poisson mixed effects model to predict school mobility (number of schools attended per academic year). Results indicated that there was no effect of the program on school mobility in either cohort (Supplemental Table C). Next, we fit a linear mixed effects model to the school attendance data (percentage of total days students attended school per academic year). This variable was multiplied and subtracted from the total number of school days, such that the outcome variable included in the models reflected the number of absences in a given school year. Results indicated lower attendance (greater absences) over time for the students in the HSWH pilot program in Cohort 1, and no effect of the program on attendance in Cohort 2 (Supplemental Table D).

## Conclusion

The current study had two primary purposes. The first was to characterize who was served by the program and how long they were served by the program. The findings indicate that the families served by the program had very high levels of need as indicated by the number of risk indicators during the baseline period, and that nearly all families remained in the program for the full two years. The second purpose was to assess program effectiveness with respect to residential stability and school outcomes. Results indicate that the program reduced the number of nights students spent in shelters, although the reduction in shelter use did not immediately translate into improvement in school attendance or a reduction in school moves. Results also suggested that the program improved over time, in that better outcomes were observed in Cohort 2 than in Cohort 1, which is consistent with the purpose of piloting this rental assistance program. These findings have implications for future research as well as policy and practice. Results suggest that the state pilot program was highly effective in reaching students and families with high levels of need and associated risks for both residential instability and poor student outcomes. The program also frequently provided sustained assistance as designed, reflected in the finding that many program recipients continue to receive funding for a full two years or beyond. However, it is likely that many families needed additional support, which resulted in extensions of program supports beyond two years. The present evaluation did not show significant positive effects on school outcomes (attendance, school mobility) which could indicate any or all of the following: a longer follow-up period is needed to detect effects of the HSWH pilot program on school outcomes; inherent limitations in administrative data (which may not be sensitive change indicators); families choosing to move when they are provided with additional resources; a need for more focus in program designs to enhance intervention effects on school outcomes; and risks associated with homelessness reflect complex, chronic, and sometimes intergenerational processes that may require multisystem and sustained solutions. Extending the evaluation over a longer time period is a key next step. Future research is needed to expand quantitative and qualitative assessments of change and also to identify predictors of program success (which students benefitted the most?).

## LIMITATIONS

*The primary limitation of this study was its short window of time to follow student outcomes. The theory of change was that stabilizing housing leads to fewer school moves and better attendance, which in turn will improve achievement. The current analysis was time limited in terms of outcome data, particularly for Cohort 2. Further analyses are needed to determine program effects after more time has passed.*

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