

Health and Education Impacts of Homeless and Housing Services in Brown County

EXECUTIVE SUMMARY

04.25.2025

—

HMIS - CIS Data Integration Project
Author: Mary Klos, CIS Project Manager

Overview

Brown County participating housing and homeless service agencies want to build more supports to prevent and end homelessness in Brown County. Part of their objective is to use data to learn how their services have been impacting health and education outcomes in the community. Understanding their impacts will also support their advocacy efforts and inform future policy.

In 2024 they received grant funding to integrate Homeless Management Information System (HMIS) information with Community Information System (CIS) data for an impact study of their services.

HMIS - is a centralized database with information on individuals who enrolled in housing or homeless services. Here is the list of Brown County service providers who participated in this study by sharing their HMIS enrollment data for January 1, 2017 through July 31, 2024 :

- City of Green Bay Police Department located at 307 S Adams St, Green Bay, WI 54301
- Ecumenical Partnership for Housing located at 200 S Monroe Ave, Green Bay, WI 54301
- Foundation Health and Wholeness RAYS Youth Services located at 1061 W Mason St, Green Bay, WI 54303
- Freedom House Ministries, Inc. located at 2997 St Anthony Dr, Green Bay, WI 54311
- House of Hope Green Bay, Inc. located at 1660 Christiana St, Green Bay, WI 54303
- New Community Shelter, Inc. located at 301 Mather St, Green Bay, WI 54303
- NEWCAP, Inc. located at 1540 Capitol Dr, Green Bay, WI 54303
- Safe Shelter located at 2155 Hutson Rd, Green Bay, WI 54303
- St. John's Ministries located at 411 St John St, Green Bay, WI 54301
- We All Rise located at 430 S Webster Ave, Green Bay, WI 54301
- Lutheran Social Services VHRP located at 2500 Bel Meadow Drive Green Bay WI 54311

CIS - is a non-profit collaborative data warehouse sponsored by Brown County United Way and Achieve Brown County that holds education and health information on individuals living in Brown County.

Health information on hospital and clinic visits occurring since 2014 comes from the NEW Community Clinic and all three major health systems serving Brown County:

- Advocate Aurora
- Bellin
- HSHS/Prevea

The education data used in this study comes from the Green Bay Area Public School District.

The integration of data from HMIS and CIS allows for a first-time-ever study of health and education impacts on the persons in Brown County enrolled in housing and homeless services.

Study Methodology

In all cases the basic study methodology is a PRE vs. POST comparison. We compare conditions in the PRE period (before any HMIS services were received), to DURING (the period while services were being received), and to POST (the period after receiving services) for all individuals that received HMIS services and have health/education data within each period.

We always check impacts separately for two different HMIS participant groups to see if there are differences depending on the type of service received. The two groups are:

S - shelter stays, and

H - housing (Rapid Re-housing, Transitional Housing, Permanent Supportive Housing).

Impacts for Street Outreach services on their own are not included in the health studies because there are not enough cases for statistically valid results, but they are reported for the education study.

Since the impacts being studied are continuous variables, e.g. - the number of hospital emergency visits per year, we use fixed effects regression modeling with dummy variables to estimate impacts, Exogenous variables, like the Covid disruption period and the age of the child, are controlled for as needed to make sure the reported impacts come from the HMIS services and not other factors.

More detail on the cleaning, preparing and matching of the data across systems, as well as details on the statistical analyses in the impact models, can be found in separate reports.

Impact Study Results

Below are summary results from the impact analysis completed for each health and education outcome that was studied. While there was a wealth of possible health and education outcome data available in CIS that could have been studied, available funding and time limited the extent of this study to the four outcomes shown below.

Emergency Hospital Visits

Youth who received HMIS services at any point during their life had an average of six Hospital Emergency Visits during their lifetime, compared to an average of two visits for all children. They used Hospital Emergency Visits three times more than other youth.

However, there is a very large and statistically significant reduction in the use of Hospital Emergency Visits after receiving HMIS services.

Note: These results are based on data for children aged 10 and under because we did not have sufficient health data in CIS to study older children or adults. The impacts of the COVID epidemic have been controlled for (removed from the study results).

883 youth that received Shelter services showed a 55% reduction in their use of Emergency Hospital Visits in the years after they left the shelter, compared to the years before entering the shelter. Average use dropped from 0.85 (0.071 x 12) visits per year to 0.38 ((0.071 - 0.039) x 12) visits per year. **In other words, it dropped from nearly one emergency visit per year to one emergency visit every two years.**

319 youth that received Housing services showed a 76% reduction in their use of Emergency Hospital Visits in the years after they left the housing program, compared to the years before entering the housing program. Average use dropped from 1.02 (0.085 x 12) visits per year to 0.25 ((0.085 - 0.064) x 12) visits per year. **In other words, it dropped from an average of one emergency visit per year to one emergency visit every four years.**

Scheduled Hospital Visits (Non-Emergency)

All youth and youth who received HMIS services both have the same average number of Scheduled Hospital Visits: seven over the first ten years of life. However, there is a very large and statistically significant reduction in the use of Scheduled Hospital Visits (Non-Emergency) for HMIS youth after receiving services. Non-Emergency Hospital Visits include both inpatient and outpatient services received at the hospitals.

Note: These results are based on data for children aged 10 and under because we did not have sufficient health data in CIS to study older children or adults. The impacts of the COVID epidemic have been controlled for (removed from the study results).

883 youth that received Shelter services showed a 78% reduction in their use of Non-Emergency Hospital Visits in the years after they left the shelter, compared to the years before entering the shelter. Average use dropped from 1 (0.084 x 12) visit per year to 0.23 ((0.084 - 0.065) x 12) visits per year. **In other words, it dropped from one visit per year to one visit every four years.**

319 youth that received Housing services showed a 58% reduction in their use of Non-Emergency Hospital Visits in the years after they left the housing program, compared to the years before entering the housing program. Average use dropped from 1.39 (0.116 x 12) visits per year to 0.59 ((0.116 - 0.067) x 12) visits per year. **In other words, it dropped from an average of over one visit per year to one visit every two years.**

Also, youth receiving Housing services showed a similar reduction, 67%, during their time receiving services. Youth receiving Shelter services showed a smaller but still significant 40% reduction during their time of receiving services. It should be noted that children receiving Housing services spent more time receiving services than those receiving Shelter services.

Clinic Visits

The average number of Clinic Visits for all youth in Brown County is less than what HMIS youth experience (an average of fifteen Clinic Visits by age 10 instead of twenty, or 25% less). This tells us that children who are HMIS clients at some time in their life use Clinic Visits more than other children in Brown County.

Looking at the impact of HMIS services, we see by comparison that HMIS services impacted Clinic Visits much less than Hospital Stays.

The impact models for Clinic Visits showed mixed results for the two different HMIS service types. Children receiving Shelter services showed a large and statistically significant increase in the number of Clinic Visits while receiving services. Children receiving Housing Services show a decrease in Clinic Visits after receiving services.

Note: These results are based on data for children aged 10 and under. Other HMIS participants could not be included because we did not have sufficient health data in CIS for them. Since young children under age 2 receive significantly more clinic visits than older children, both the age of the child and the impacts of the COVID epidemic have been controlled for (removed from the study results).

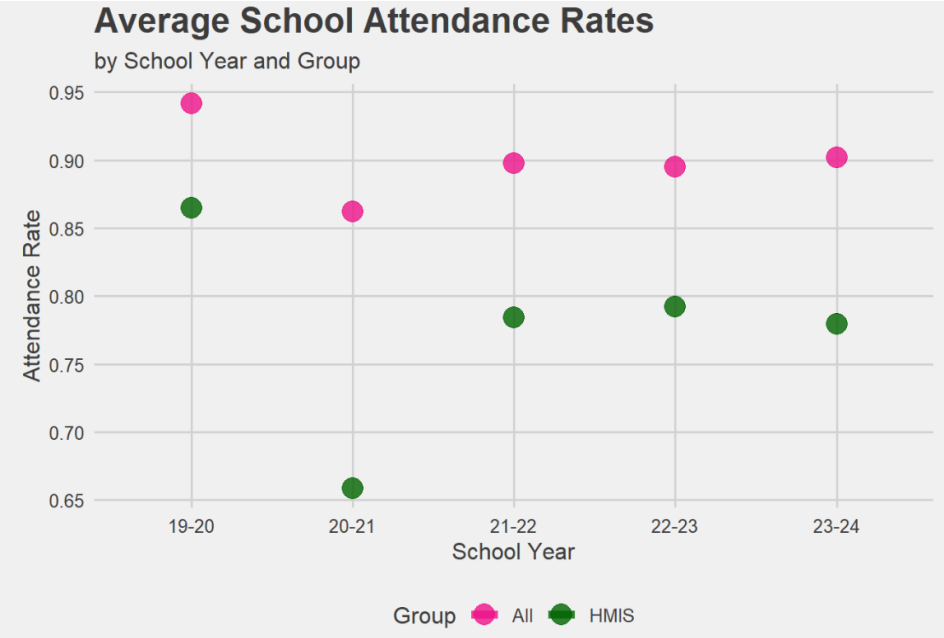
826 youth that received Shelter services showed a 17% increase in their use of Clinic Visits while receiving services, compared to the years before entering the shelter. Average use increased from 2.2 (0.18 x 12) visits per year to 2.5 ((0.18 + 0.03) x 12) visits per year. **In other words, it increased from two visits per year to two and a half visits per year.**

308 youth that received Housing services showed a 12% reduction in their use of Clinic Visits in the years after they left the housing program, compared to the years

before entering the housing program. Average use dropped from 3 (0.25 x 12) visits per year to 2.6 ((0.25 - 0.03) x 12) visits per year.

School Attendance

When we compare the school attendance rate for students receiving HMIS services to all students, we see that they generally follow the same pattern over the last five years but at a lower attendance level.



We see the average attendance rate for all students dropped from 94% to 86% in 20-21, the year with very little in person learning. We know the rate for 20-21 is not comparable to the attendance rate seen during most of 19-20 (before March 2020) because of changes in definition. However, we also see the attendance rate recovers but does not rise to pre-COVID levels even after the return to in person learning.

We see a similar pattern for students who received HMIS services, but their attendance is always at a lower level than all students, particularly during the COVID period.

With this background information, we can now look more closely at the students who received HMIS services to see if receiving services impacted their attendance rate. **What we see is a small increase in the school attendance rate for these students during and/or after receiving services.**

Students that received Housing services showed a 3 percentage point increase in school attendance while receiving services and after receiving services, compared to the period before being housed.

Students that received Emergency Shelter services showed no change in school attendance while receiving services and a 2 percentage point increase after receiving services. Note that if the student experienced more than one shelter stay, the entire time between the beginning of the first stay and the end of the last stay is considered the DURING period.

Students that received Street Outreach services showed a 12 percentage point increase in school attendance while receiving services and a 30 percentage point increase after receiving services!

While the impacts revealed in the Street Outreach model are large and statistically significant, it should be noted it is possible that there is a data issue affecting these high impact results: all of the students in this group are in their late teens, and they are the ones that received Street Outreach services and had attendance data in both the PRE and POST periods. If a student received Street Outreach services but was not enrolled in school during both periods, they would not be included in this study.

