

Housing is Healthcare

Measuring the cross-sector impact of
a major housing initiative in Portland, Oregon



Blackburn Center

Background

The *Housing is Healthcare* initiative was born out of significant investment of resources from Central City Concern (CCC), six local healthcare organizations, and other partners aimed at improving the health of vulnerable populations by increasing access to housing and other key services.

The cornerstone of the project was the completion of the Blackburn Center, consisting of 165 housing units connected to a new health clinic offering an array of integrated services. The Blackburn Center provides permanent and short-term housing. The short-term housing includes recovery housing for those managing their addiction and recuperative care housing for homeless patients transitioning from inpatient hospital stays.

With funding from the engaged hospital systems, the Center for Outcomes Research and Education (CORE) launched an observational study of the impacts of obtaining housing at the Blackburn Center on cross-sector outcomes. This document provides an overview of CORE's findings.



Part of a \$21.5 million investment by:



Adventist Health
Portland



The Blackburn Center: Housing and Services

The Blackburn Center offers three types of housing: permanent supportive, recovery, and recuperative care. The Blackburn Center also includes an on-site federally qualified healthcare center.

Residents of the Blackburn Center can access extensive services available on-site such as:

- ▶ Tailored interventions and guidance on self-management, goal setting and access to resources
- ▶ Support in making/keeping appointments with healthcare providers, including transportation
- ▶ Case management for complex needs
- ▶ Employment resources
- ▶ Personal hygiene supplies, clothing & food boxes
- ▶ Withdrawal treatment
- ▶ Outpatient treatment
- ▶ Medication-supported recovery
- ▶ Inpatient treatment (24/7 care)
- ▶ Recovery groups & peer support
- ▶ DUI treatment

 PERMANENT SUPPORTIVE HOUSING
34 STUDIO UNITS

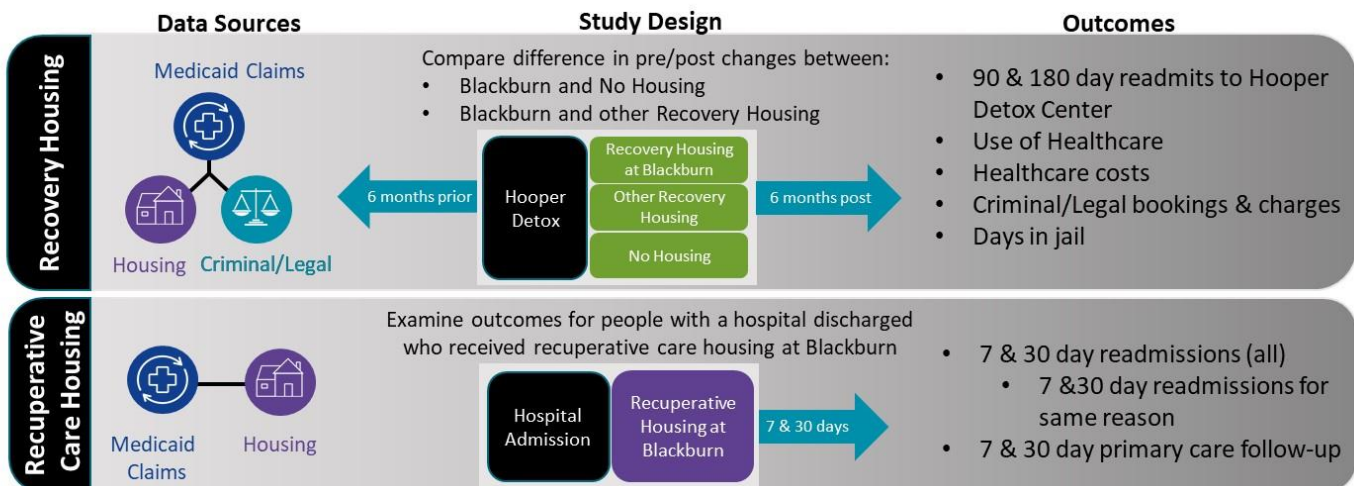
 RECOVERY HOUSING
80 UNITS
~ 6 month stays

 RECUPERATIVE CARE HOUSING
51 UNITS
~ 3 month stays

Study Overview

We brought together data from housing, healthcare, and criminal/legal systems to assess the impacts of obtaining recovery or recuperative care housing at Blackburn from June 2019 to August 2020.

- ▶ **PERMANENT SUPPORTIVE HOUSING:** We were unable to examine the impacts of permanent supportive housing due to insufficient sample size and complicating factors in the pre/post data due to COVID-19.
- ▶ **RECOVERY HOUSING:** CORE focused on individuals exiting CCC’s Hooper Detox Center and examined outcomes for three groups: those who obtained housing at Blackburn, those with other recovery housing, and those discharged as homeless. For each group, we used Difference-in-Differences (DiD) models to compare changes in outcomes *before* and *after exiting* Hooper. Measured outcomes included readmissions to Hooper Detox Center; healthcare use and costs; and criminal legal bookings, charges, and jail days. The DiD models were adjusted for age, medical complexity, and the month of discharge from the Hooper Detox Center.
- ▶ **RECUPERATIVE CARE HOUSING:** CORE included individuals with a recent discharge from a hospital inpatient stay who then received recuperative care housing at the Blackburn Center. We examined 7- and 30-day hospital readmissions and connection to primary care following hospital discharge. For context, we identified benchmarks in the literature for readmit rates among homeless individuals.



Study Results

BLACKBURN CENTER RECOVERY HOUSING



Population

- ▶ 247 people received housing at the Blackburn Center during the study window; of those, 112 were discharged from Hooper Detox Center
- ▶ Inclusion in the study was limited to those who received housing within 4 days of discharge from the Hooper Detox Center, were Medicaid members, and had at least 6 months of available Medicaid data
- ▶ Control groups consisted of individuals discharged from Hooper Detox Center and were housed at other Recovery Housing or were unhoused
- ▶ Total population included in the study:
 - ▶ 75 people at the Blackburn Center Recovery Housing
 - ▶ 63 people who received other recovery housing
 - ▶ 57 people discharged as homeless
- ▶ Demographics were similar across groups

Study Findings

Compared to those discharged as homeless, obtaining Recovery Housing at the Blackburn Center was associated with:

ODDS OF HOOPER DETOX READMISSION within 90 days



REDUCED BY
63%

Average use of **EMERGENCY DEPARTMENT** per member
REDUCED BY

3.65
VISITS
ANNUALLY



Average use of **PRIMARY CARE** per member
INCREASED BY

3.02
VISITS
ANNUALLY



- ▶ Trend for **LOWER MEDICAL COSTS** after obtaining housing \$\$\$
- ▶ **NO DIFFERENCE** in the **NUMBER OF BOOKINGS OR LENGTH OF JAILS STAYS**; but this was **REDUCED FOR BOTH GROUPS** (those housed at the Blackburn Center and those discharged as homeless)

There were NO DIFFERENCES in measured outcomes between the Blackburn Center Recovery Housing and the other recovery housing group

Study Results

BLACKBURN CENTER RECUPERATIVE CARE HOUSING



Population

- ▶ **388 people** received recuperative care at the Blackburn Center
- ▶ Inclusion was limited to those who received housing within 4 days of discharge from a hospital inpatient stay, were Medicaid members, and had at least 6 months of available Medicaid Data
- ▶ No comparison group available, so we used previously published information from other studies on readmission rates for homeless populations for context¹⁻³
- ▶ Total population included in the study:
 - ▶ **210** people housed at the Blackburn Center

Study Findings

Hospital Readmission Rates:

7 DAY
READMISSION RATE

4.3%

30 DAY
READMISSION RATE

13.8%

30 DAY READMIT RATES from
other studies of **homeless**
populations¹⁻³

17.2-27.7%

Primary Care Follow-up Rates:

7 DAY PRIMARY CARE
FOLLOW-UP

47.6%

30 DAY PRIMARY CARE
FOLLOW-UP

73.8%

1. Miyawaki A, et al., Hospital Readmissions and Emergency Department Revisits of Homeless Patients Treated at Homeless Servicing Hospitals in the USA, Journal of General Internal Medicine, 2020.

2. Khatana SA, et al., Association of Homelessness with Hospitals Readmissions—An Analysis of Three Large States, Journal of General Internal Medicine, 2020.

3. Racine M, et al., Thirty-Day Hospital Readmission Among Homeless Individuals with Medicaid in Massachusetts, Medical Care, 2020.



STUDY LIMITATIONS

Limitations of this study include:

- ▶ Small sample size
- ▶ Limited access to control groups
- ▶ COVID-19 pandemic
- ▶ Lack of information on long-term housing
- ▶ Limited information on homeless groups

Conclusion

Obtaining Recovery Housing at the Blackburn Center improved healthcare outcomes, including:

- ▶ Reduced readmits to Hooper Detox Center
- ▶ Reduced the number of emergency department visits,
- ▶ Increased engagement in primary care

While we saw reductions in interactions with the criminal/legal system, there were no differences compared to the homeless control group. Blackburn Center outcomes did not differ from other recovery housing, which broadly highlights the importance and impact of having any type of recovery housing available for individuals managing a substance use disorder. Recuperative care housing showed promising readmission rates in the context of other larger studies in the homeless population.

Taken together, these results indicate that housing at the Blackburn Center has major positive impacts on healthcare.

CORE

Center for Outcomes
Research and Education

The Center for Outcomes Research and Education (CORE) is an independent research team focused on improving the health of underserved populations. Our research, program evaluation, and data science work are designed to provide essential information to health policy and system decision makers.

Evidence for Change

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