

# HEALTH IN HOUSING

## EXPLORING THE INTERSECTION BETWEEN HOUSING & HEALTH CARE

### EXECUTIVE SUMMARY

This study, conducted by the Providence Center for Outcomes Research & Education (CORE), directly explores the link between affordable housing and health care through the lens of several national health reform metrics: better connection to primary care, fewer emergency department (ED) visits, improved access and quality, and lower costs.

This is one of the first studies to directly assess the impact on health care costs when low-income individuals move into affordable housing. Medicaid claims data were used to measure changes in health care cost and use, and survey data were used to examine health care access and quality. The study included 145 housing properties of three different types: family housing (FAM), permanent supportive housing (PSH), and housing for seniors and people with disabilities (SPD). The role of integrated services within housing was also considered.

### ENTERPRISE - Oregon Health & Housing Learning Collaborative

In 2014, Enterprise Community Partners established a peer-to-peer collaborative to coordinate and support efforts of nonprofit affordable housing providers to develop strategies that improve the health and well-being of residents, while demonstrating cost savings to the health care system. Enterprise partnered with CORE on this study to assess the linkage between housing and health care as it affects vulnerable populations in Oregon.

### STUDY POPULATION

A total of 1,625 individuals living in one of the 145 participating properties were included in the claims analysis. To be included, individuals must have moved into their current housing unit during our study window, must have been members of our partnering Medicaid Coordinated Care Organization (Health Share of Oregon - HS), and must have had a minimum of three months of coverage before and after their move-in date. Our survey sample consisted of 513 Health Share members across 12 housing properties (4 from each housing type). 275 individuals responded to the survey.

#### PREVALENCE OF TOP DIAGNOSES IN STUDY POPULATION

We found that the individuals in the claims sample living in PSH and SPD housing had higher rates of physical and behavioral health diagnoses than the average Health Share member.

Diagnoses	FAM	PSH	SPD	Avg HS Mem
<b>Physical Health</b>				
Hypertension	14%	42%	54%	20%
Asthma	18%	21%	20%	9%
Diabetes	8%	17%	28%	10%
Obesity	17%	20%	21%	12%
COPD	3%	15%	19%	3%
<b>Behavioral Health</b>				
Affective Disorder	17%	51%	34%	13%
Depression	13%	34%	26%	10%
Chemical Dependency	2%	11%	9%	2%
Non-Organic Psychosis	3%	15%	10%	2%

### KEY FINDINGS:

#### 1. Costs to health care systems were lower after people moved into affordable housing.

- Total medical expenditures declined by 12%.
- Declines in expenditures were seen for all housing types.

*IMPLICATION: Access to affordable housing will likely drive down costs to the health care system.*

Pre/Post Change in Health Care Expenditures

	Pre	Post	Δ	%Δ	p value
Overall	\$386	\$338	-\$48	-12%	0.00
FAM	\$257	\$242	-\$22	-8%	0.12
PSH	\$649	\$538	-\$84	-14%	0.03
SPD	\$525	\$438	-\$84	-16%	0.00

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## 2. Primary care visits went up after move-in; emergency department visits went down.

In the year after people moved into housing:

- Outpatient primary care utilization increased 20%.
- Emergency department visits fell by 18%.
- Similar trends were observed for each housing type.

*IMPLICATION: Affordable housing helps meet major health reform utilization metrics of increased connection to primary care and decreased use of emergency department services.*

Percent Change in Utilization Following Move-In

	PCP	ED
<b>Overall</b>	+20%	-18%
<b>FAM</b>	+17%	-10%
<b>PSH</b>	+23%	-37%
<b>SPD</b>	+19%	-18%

## 3. Residents reported that access to care and quality of care improved after moving into housing.

- Many residents reported that health care access and quality were better after move-in than before; very few people reported it was worse.

*IMPLICATION: Expenditure and utilization differences did not come at the expense of access or quality.*

	Better	Worse		Better	Worse
<b>ACCESS</b>	40%	4%	<b>QUALITY</b>	38%	7%

## 4. Integrated health services were a key driver of health care outcomes.

- When we controlled for other factors, the presence of health services (integrated medical, mental health, substance use and dental staff/ services including nurses, doctors, and coordinated transportation to off-site services) was a key driver of lower costs and decreased ED use, even when awareness of services among residents was low.

*IMPLICATION: Integrated health services may increase the benefits of housing to both residents and health care systems and increasing use of these services may result in even greater cost and utilization differences.*

Adjusted impact of health services

<b>EXPENDITURES</b>	-\$115 member/month
<b>ED VISITS</b>	-0.43 visits/year

Awareness of select on-site services

<b>Medical Services</b>	33%
<b>Mental Health Services</b>	26%

### THE BOTTOM LINE

When Medicaid-covered residents moved into one of the 145 different affordable housing properties included in this study, their health care experiences changed dramatically. Over the following year, they used more primary care, had fewer ED visits, and accumulated lower medical expenditures than in the year before they moved in. Many also reported better access and quality of care. Integrated health services available to housing residents were a key driver behind lower costs and fewer emergency department visits despite the fact that many residents did not know such services were available. This suggests there may be potential for even greater impact if awareness and use of those services were increased. We live in a profoundly interconnected world, and we may be moving past the time when any sector can go it alone. In the emerging era of accountable care, health care systems and affordable housing providers may want to mutually consider the potential benefits of stronger cross-sector collaboration.