



Unsheltered vs. Sheltered Adults Experiencing Homelessness: Health Care Spending and Utilization



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INTRODUCTION

- Compared to sheltered individuals, rough sleepers experience higher burdens of physical illness, mental illness, substance use disorders, trauma, and death.
- To our knowledge, no study has used claims data to compare health care spending and utilization among unsheltered and sheltered adults.

METHODS

- We used 2013-2015 Massachusetts Medicaid (MassHealth) claims data for patients receiving care from Boston Health Care for the Homeless Program (BHCHP).
- In unadjusted analyses, we compared average annual spending and utilization between unsheltered and sheltered individuals using two-tailed t-tests.
- In adjusted analyses, we compared spending and utilization between these groups adjusted for age, sex, race, primary language, disability status, year fixed effects, and DxCG risk score.

RESULTS

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Table 2 Health Care Spending and Utilization Among Unsheltered and Sheltered Homeless Adults

	Unsheltered population (N= 96)	Sheltered population (N= 451)	Ratio of difference	Unadjusted difference	Adjusted difference			
					Without risk score	pvalue	With risk score	pvalue
Spending (\$ per person per year)								
Total spending	32,331	9648	3.4	22,682	18,696	< 0.001	2199	0.15
By type of care								
Medical services	28,579	7776	3.7	20,802	17,699	< 0.001	2342	0.07
Behavioral health*	1772	898	2.0	874	278	0.67	24	0.97
Prescription drugs	1980	974	2.0	1006	719	0.08	- 166	0.68
By setting of care								
Inpatient	12,640	3084	4.1	9556	8354	< 0.001	- 539	0.65
Hospital outpatient	3384	1661	2.0	1723	1189	0.001	- 110	0.72
Emergency department	1387	622	2.2	765	542	0.003	45	0.80
Physician services	13,608	3622	3.8	9986	8067	< 0.001	2858	< 0.001
Utilization (per person per year)								
Inpatient admissions	0.98	0.39	2.5	0.59	0.42	0.004	- 0.23	0.04
Emergency department visits	10.56	5.19	2.0	5.37	3.75	0.002	- 0.28	0.80
Physician visits	2.84	2.36	1.2	0.48	- 0.04	0.93	- 1.09	0.01
Psychotherapy visits	0.52	0.52	1.0	0.01	- 0.24	0.41	- 0.28	0.34

Notes: This table compares the average spending and utilization among unsheltered and sheltered homeless adults who were enrolled for at least 1 year from 2013 through 2015 in the Boston Health Care for the Homeless Program.

*Behavioral Health Services include only 2014 and 2015 data, given that Massachusetts Behavioral Health Partnership claims data were available starting in September 2013

- The average risk score of rough sleepers was almost threefold greater than that of sheltered individuals.
- Health care spending among unsheltered adults averaged 3.4x that of sheltered adults.
- The ratio of unadjusted spending for unsheltered vs. sheltered adults was 4.1 for inpatient, 2.0 for outpatient, 2.2. for the ED and 3.8 for physician services.

CONCLUSIONS

- This study revealed substantially greater health care spending and utilization among unsheltered adults relative to their sheltered counterparts, largely explained by greater disease burden.
- This study motivates the urgency of making preventive health care more available for rough sleepers as a priority.

REFERENCES

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