

SUMMARY OF STUDIES: MEDICAID / HEALTH SERVICES UTILIZATION AND COSTS

Studies Pertaining to Homeless People in Hospital Settings:				
City / State	Study / Program Description	Health Utilization	Impact of Housing	Additional Information
Chicago Housing for Health Partnership ^{1,2}	<p>Population: Homeless people (30+ days) with inpatient hospitalization for chronic medical condition (HIV/AIDS, renal disease, liver disease, cancer, COPD, stroke, diabetes, etc):</p> <ul style="list-style-type: none"> ○ 70% chronic homeless ○ 36% on Medicaid at enrollment ○ 55% uninsured ○ 71% long term substance use ○ 31% mental illness <p>Study / Program: Random assignment to usual care or intervention = recuperative care (respite) and access to permanent supportive housing</p>	<p>For usual care group (n= 206) in 18 months:</p> <ul style="list-style-type: none"> ○ 10,023 days nursing home ○ 2,447 days hospital ○ 943 Emergency room visits 	<p>Intervention group (n = 201):</p> <ul style="list-style-type: none"> ○ 45% fewer days nursing home ○ 42% fewer days hospital ○ 46% fewer ER visits 	<p>Random Assignment: Rigorous study design allows saying intervention produced the outcomes.</p> <p>These are <i>preliminary</i> results pending publication.</p>
California Frequent Users of Health Services Initiative ³	<p>Population: Adults with frequent and avoidable visits to hospital emergency rooms in 6 counties:</p> <ul style="list-style-type: none"> ○ 45% homeless (across all projects) ○ 45% to 60% homeless in more urban projects ○ 65% chronic disease ○ 53% substance abuse ○ 32% mental illness <p>Participants enrolled in intensive case management services; some homeless participants linked to permanent housing in counties where available</p>	<p>For homeless clients who got services but no housing:</p> <ul style="list-style-type: none"> ○ 12% fewer ED visits ○ 26% fewer inpatient admissions ○ 26% <i>increase</i> in number of inpatient days 	<p>Homeless clients connected to permanent housing had greater reductions in ED use and charges compared to those who remained homeless.</p> <ul style="list-style-type: none"> ○ 34% fewer ED visits ○ 27% fewer inpatient admissions ○ Significantly greater reductions in inpatient days = 27% fewer days 	<p>Mortality: 5 percent of enrolled participants died. Causes of death often included substance abuse related factors (e.g. liver disease, stroke or organ failure related to alcoholism or other drug abuse). Significant health problems and costs related to addiction.</p>

Studies of Housing Programs Using the “Housing First” Model*:

Please note: These “before and after” studies track changes in utilization of health and other services for homeless individuals who have entered a supportive housing program. For most studies, the results include utilization by people who enter and later leave supportive housing.

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San Francisco⁴ Cannon Kip Community House and Lyric Hotel	Population: Homeless (mostly chronic) adults with disabilities in 2 SF supportive housing projects <ul style="list-style-type: none"> ○ 73% male ○ Median age 43 (10 years ago) ○ 59% homeless 2 to 8 years before move-in ○ 75% both substance use and mental disorders ○ 91% current or past substance use disorder 	During the <i>one year before</i> entering supportive housing: <ul style="list-style-type: none"> ○ 53% had at least 1 emergency room visit; average 1.94 visits/person ○ 19% had inpatient hospitalization(s); average .34 admissions / person Supportive housing participants were <u>not</u> selected based on prior service utilization	During the <i>one year after</i> entering supportive housing: <ul style="list-style-type: none"> ○ 56% fewer emergency room visits ○ 44% fewer inpatient hospital admissions ○ Control group had no reduction in probability of visiting emergency room and much smaller (not significant) reduction number of ER visits 	Random assignment: Study used random assignment to wait list for control group analysis.
Denver⁵ Colorado Coalition for the Homeless/ Denver Housing First Collaborative	Population: Chronically homeless adults with disabling health conditions <ul style="list-style-type: none"> ○ Average 8 years of homelessness ○ Priority for enrollment for people with multiple disabilities Program includes housing (single site and scattered sites) plus Assertive Community Treatment (ACT) services model	During the <i>two years before</i> entering supportive housing: <ul style="list-style-type: none"> ○ 3.5 ER visits /person ○ 5.4 inpatient nights/ person ○ 31 detox nights/ person ○ 26 days jail/ person 	During the <i>two years after</i> entering supportive housing: <ul style="list-style-type: none"> ○ 34% fewer ED visits ○ 40% fewer inpatient hospital days ○ 82% fewer detox visits ○ 76% fewer days in jail Average savings \$31,545 per person (2 years) <ul style="list-style-type: none"> ○ 50% improvements in health status ○ 43% improved mental health ○ 15% reduced substance use 	Small sample: Only 36 people enrolled for 24+ months at time of study; 19 gave consent for study participation.

*Housing First models include:

- Expedited housing placement
- No “readiness” or abstinence requirements
- Assertive engagement in health and recovery support services

Studies of Housing Programs Using the "Housing First" Model, continued.				
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Maine⁶ Cost Analysis of Permanent Supportive Housing	Population: Formerly homeless supportive housing tenants in Greater Portland area <ul style="list-style-type: none"> ○ 60% men ○ 94% serious mental illness ○ 32% chronic alcohol abuse ○ 10% chronic drug abuse ○ Median age 46 ○ 64% entered supportive housing from emergency shelter 	During the <i>one year before</i> entering supportive housing average annual cost per person for health care, ambulance, jail & policy costs were \$28,045 Biggest component of costs was health care in hospitals	During the <i>one year after</i> entering supportive housing: <ul style="list-style-type: none"> ○ 77% fewer inpatient hospitalizations ○ 62% fewer ER visits ○ 60% fewer ambulance transports ○ 38% fewer psychiatric hospitalizations ○ 62% fewer days in jail ○ 68% fewer police contacts ○ 22% <i>increase</i> substance abuse treatment ○ 35% <i>increase</i> mental health treatment ○ 31% <i>increase</i> prescription drug costs \$944 average savings per person considering service costs + housing costs compared to services 1 year before	Formerly homeless people with disabilities had lived in supportive housing for at least one year at time of recruitment to participate in the study. Study included 99 who gave consent (out of 159 who met study criteria)
Portland, OR^{7,8} Community Engagement Program: Central City Concern	Population: Chronically homeless adults with multiple disabling conditions <ul style="list-style-type: none"> ○ 80% male ○ Average age 42.2 years ○ Average 3.7 years homeless in past 5 years (8.6 yrs @ lifetime) Assertive Community Treatment (ACT) model with permanent housing	\$42,075 / person estimated average annual pre-enrollment costs for major services <ul style="list-style-type: none"> ○ More than 80% of total costs were for inpatient medical hospitalizations & ER visits About 10% of total costs were for mental health or alcohol & drug inpatient & outpatient	\$16,108 / person estimated cost of services in first year after enrollment <ul style="list-style-type: none"> ○ 58% fewer days inpatient medical hospitalization 87% fewer ER visits. Program significantly increased outpatient visits for mental health and alcohol & drug treatment \$9,668 avg. annual cost services	Small sample: Only 39 participants identified for pilot study, 35 completed 3 interview schedule. Pre-enrollment information based on self-report and average costs for services provided by experts

Studies of Housing Programs Using the "Housing First" Model, continued.				
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Seattle ^{9,10} Begin at Home: Plymouth Housing	Population: Long term homeless (avg. 41 months) with complex needs from Medical Respite program (\$10,000 + costs in past year) and/or frequent users of Sobering Center (60+ visits in past year) <ul style="list-style-type: none"> o 75% male o Average age 49.9 o 74% mental illness o 68% alcohol / drug o High rates of chronic medical conditions (chronic infection / abscesses, hepatitis, heart & liver disease, etc) 	During the <i>one year before</i> entering supportive housing the 20 participants had: <ul style="list-style-type: none"> o 57 inpatient admissions / 329 hospital days o 191 Emergency Dept visits o 349 Sobering Center visits 	During the <i>one year after</i> entering supportive housing the 20 participants had: <ul style="list-style-type: none"> o 13 inpatient admissions / 56 hospital days o 50 Emergency Dept. visits o 11 Sobering Center visits <p>Acute care service cost avoidance \$1.5 million in first year; compared to \$372,000 cost of housing & services program (20 participants)</p>	
OTHER STUDIES				
Boston ¹¹ Rough Sleepers: A Five Year Prospective Study in Boston, 1999-2003	119 street dwellers. Costs for this cohort were tracked over 5 years	<ul style="list-style-type: none"> o 18,384 E.R. visits o 871 medical hospitalizations <p>Average annual health care cost \$28,436 for those living on the street</p>	Average annual health care costs for those in cohort who obtained housing: \$6,056	

¹ To access a policy paper from the Third Housing and HIV/AIDS Research Summit, which describes this study please visit:

<http://documents.csh.org/documents/ResourceCenter/SysChgToolkit/CredibleData/NAHCSummitIII/PolicyPaper.pdf>

² To access a March, 2008 press release describing the results of the study please visit: http://www.aidschicago.org/about_afc/3_6_2008.php

³ To access the Final Report, published August, 2008, please visit: <http://documents.csh.org/documents/fui/FUHSIEvaluationReportFINAL.pdf>

⁴ To access this report please visit: <http://psychservices.psychiatryonline.org/cgi/content/full/57/7/992>

⁵ To access the December, 2006 report, please visit: www.shnny.org/documents/FinalDHFCCostStudy.pdf

⁶ To access the September, 2007 report, please visit: <http://documents.csh.org/documents/ResourceCenter/SysChgToolkit/CredibleData/CostOfHomelessness.pdf>

⁷ To access this report, please visit: <http://documents.csh.org/documents/policy/PortlandCostStudy.pdf>

⁸ To access a brief from the National Alliance to End Homelessness that describes this study, please visit:

http://www.endhomelessness.org/files/1200_file_Supportivehousing saves.pdf

⁹ To access the October, 2007 report, please visit: http://www.ich.gov/newsletter/images/2008_summit/Final1811CostNumbers.pdf

¹⁰ To access a press release describing the success of both the 1811 Eastlake and Plymouth Housing sites, please visit:

<http://www.seattle.gov/news/detail.asp?ID=8078&Dept=40>

¹¹ O'Connell, JJ, Swain S. Rough Sleepers: a Five Year Prospective Study in Boston, 1999-2003. Presentation, Tenth Annual Ending Homelessness Conference, Massachusetts Housing and Shelter Alliance, Waltham, MA 2005.