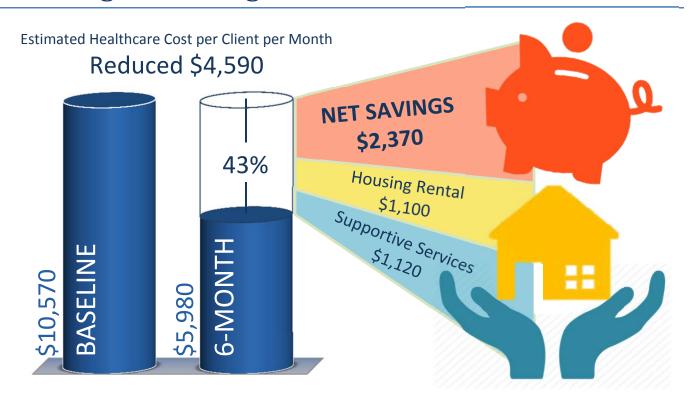
Estimated Healthcare Cost Reduction among Hawai'i Pathways Clients in the State's Housing First Program



Data Source: Hawai'i Pathways Project, Baseline and 6-Month Interviews, 9/2014 – 9/2015.

After obtaining stable housing, the estimated healthcare cost for Hawai'i Pathways clients served through the State's Housing First Program¹ dropped from an average of \$10,570 per client per month to \$5,980. This represents a 43% decrease over a six-month period. The estimated cost savings from reduced healthcare utilization by stably housed clients was \$4,590 per month.

The cost of housing rental subsidies for each client is about \$1,100 per month² and the cost of providing supportive services³ is estimated to be \$1,120 per month, resulting in a total estimated cost of \$2,220 per month per client. The net saving after accounting for these expenses is estimated to be \$2,370 per client per month.

Hawai'i Pathways Project is funded by the Substance Abuse and Mental Health Services Administration (SAMHSA) through a grant awarded to the State's Department of Health Alcohol and Drug Abuse Division (DOH-ADAD) to serve chronically homelessness individuals who are diagnosed with substance abuse and/or mental disorders. Pathways provides wrap-around services to support clients in achieving housing stability and better recovery outcomes. It is modeled after *Pathways to Housing*, an evidence-based program that is proven to be both effective in ending chronic homelessness and effective in reducing the cost of serving this population. Housing for Pathways clients is provided by three major housing programs funded by the State, the City, and the U.S. Department of Housing and Urban Development.

Results of this preliminary analysis should be interpreted with caution as they are based on clients' self-report data and may be different from the actual service utilization. Cost estimation is based on the average cost for specific type of health services from the latest published studies and may not represent typical healthcare cost for the chronically homeless population.

Changes in Healthcare Utilization among Hawai'i Pathways Clients in the State's Housing First Program

Type of Service	30-Day Usage of All Clients ⁴ (n=15)			Estimated Cost ⁵			Estimated Cost
	Baseline	6-month	Change	Baseline	6-month	Change	Savings
ER visit, times	11	5	-55%	\$13,563	\$6,165	-55%	\$7,398
Inpatient care, nights	60	37	-38%	\$115,140	\$71,003	-38%	\$44,137
Outpatient visit, times	150	63	-58%	\$29,850	\$12,537	-58%	\$17,313
Total	221	105	-52%	\$158,553	\$89,705	-43%	\$68,848
Average Per Client	14.7	7.0	-52%	\$10,570	\$5,980	-43%	\$4,590

Data Source: Hawai'i Pathways Project, Baseline and 6-Month Interviews, 9/2014 – 9/2015.

Notes

- ER visit: Median ER charge was \$1,233 for the ten most frequent outpatient diagnoses based on a national study utilizing the 2006-2008 Medical Expenditure Panel Survey (MEPS) data (Caldwell, Srebotnjak, Wang, & Hsia, 2013).
- Inpatient care: Hospital adjusted expenses per patient day for Hawai'i was \$1,919 based on 2013 AHA Annual Survey of the American Hospital Association (The Henry J. Kaiser Family Foundation State Health Facts, 2015).
- Outpatient visit: A physician office visit averaged \$199 in the U.S. in 2008 based on the Medical Expenditure Panel Survey (MEPS) data (AHRQ News and Numbers, 2011).

References

Agency for Healthcare Research and Quality. (2011) Hospital Outpatient Care Represents More Than 20 Percent of all Ambulatory Care Costs in U.S.. AHRQ News and Numbers, April 20, 2011, U.S. Department of Health & Human Services. Retrieved from http://archive.ahrq.gov/news/newsroom/news-and-numbers/042011.html

Caldwell, N., Srebotnjak, T., Wang, T., & Hsia, R. (2013). "How Much Will I get Charged for This?" Patient Charges for Top Ten Diagnoses in the Emergency Department. PLoS ONE 8(2): e55491.

Hawai'i State Department of Human Services. (2014). Report on the Housing First Program Pursuant to Section 346-378 Hawai'i Revised Statues, December 2014, Benefit, Employment, and Support Services Division. Retrieved from http://humanservices.hawaii.gov/wp-content/uploads/2015/01/HRS-346-378-housing-first.pdf

The Henry J. Kaiser Family Foundation State Health Facts. (2015). Data Source: 1999 - 2013 AHA Annual Survey, Copyright 2015 by Health Forum, LLC, an affiliate of the American Hospital Association. Special data request, 2015. Retrieved from http://kff.org/other/state-indicator/expenses-per-inpatient-day/?state=HI

¹ The analysis includes all fifteen (15) Hawai'i Pathways Project's clients who utilize the State's Housing First voucher and have completed both the baseline and 6-month interviews as of September 30, 2015. The project has housed 20 clients via the State's Housing First program but five of them have not yet reached 6-month interview time point. An additional 18 clients have been housed through House First approaches but have utilized the City's Housing First vouchers (10) or HUD's Permanent Supportive Housing vouchers (8) rather than State Housing First vouchers.

² According to the Department of Human Services' report to the State Legislature, the housing costs have averaged about \$1,100 per month for each client served by the State's Housing First Program.

³ DOH-ADAD was awarded 3.1 million from SAMHSA to implement the Hawai'i Pathways Project to serve a total of 155 clients over a 3-year period. Assuming that the average length of service is 18 months, the estimated cost is calculated to be about \$1,120. The actual cost should be lower if the non-service components of the grant can be excluded.

⁴ Data is based on clients' self-report healthcare utilization in the 30 days prior to the interviews at program admission (baseline) and 6 months afterwards.

⁵ The estimated costs are calculated by multiplying the total usage with the average cost for each type of service: