



Employment Outcomes Associated with Rapid Re-housing Assistance for Homeless DSHS Clients in Washington State

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PROGRAMS PROVIDING Homelessness Prevention and Rapid Re-Housing (HPRR) assistance served 15,057 individuals during calendar year 2010, according to the Homeless Management Information System (HMIS). HPRR assistance may include short and medium term rent assistance, relocation and stabilization assistance, security deposits, utility payments and other financial assistance to help stabilize someone at risk of losing their current housing or rapidly re-house a literally homeless person into a permanent location they do not have to leave once the assistance ends. Individuals receiving HPRR assistance have a history of under-employment.¹ Using a quasi-experimental, matched comparison group design, this report examines employment outcomes of working-age adults who were eligible for publicly funded medical assistance for at least one month during the prior year and who also received assistance to be rapidly re-housed in 2010 as recorded in HMIS (HMIS-DSHS Rapid Re-housing clients).²

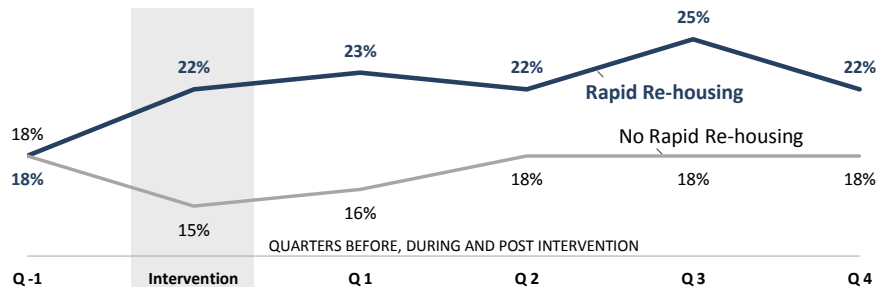
KEY FINDINGS | Employment Outcomes: During and After Rapid Re-housing

Compared to similar homeless clients who did not receive rapid re-housing assistance according to HMIS, HMIS-DSHS Rapid Re-housing clients experienced improved employment outcomes during and at least one year after the intervention:

- HMIS-DSHS Rapid Re-housing clients were almost 50 percent more likely than the comparison group to be employed during the quarter they received assistance.
- HMIS-DSHS Rapid Re-housing clients were 25 percent more likely than the comparison group to be employed sometime over the entire follow-up year.
- On average, HMIS-DSHS Rapid Re-housing clients earned about \$422 more than the comparison group over the follow-up year.

Employment rates of homeless DSHS clients are higher both during and after Rapid Re-Housing Assistance

Statistically adjusted to account for employment history and other characteristics.



¹ A Profile of Housing Assistance Recipients in Washington State: History of Arrests, Employment, and Social and Health Service Use SFY 2006-2010, Olympia, WA: Research and Data Analysis Division, <http://www.dshs.wa.gov/pdf/ms/rda/research/11/160.pdf>.

² Homeless Prevention services will be examined when sufficient data are available to construct an appropriate comparison group.



STUDY QUESTION | Employment Outcomes Associated with Rapid Re-housing Assistance

In this report, we examine the following:

1. **Five-year employment histories and characteristics** of working-age DSHS clients (18 to 64) identified as literally homeless who received HPRR assistance according to HMIS in calendar year 2010.
2. **One-year employment outcomes**—employment rates, quarters worked, and total earnings—of HMIS-DSHS Rapid Re-housing clients compared with similar homeless adults who did not receive housing assistance according to HMIS.

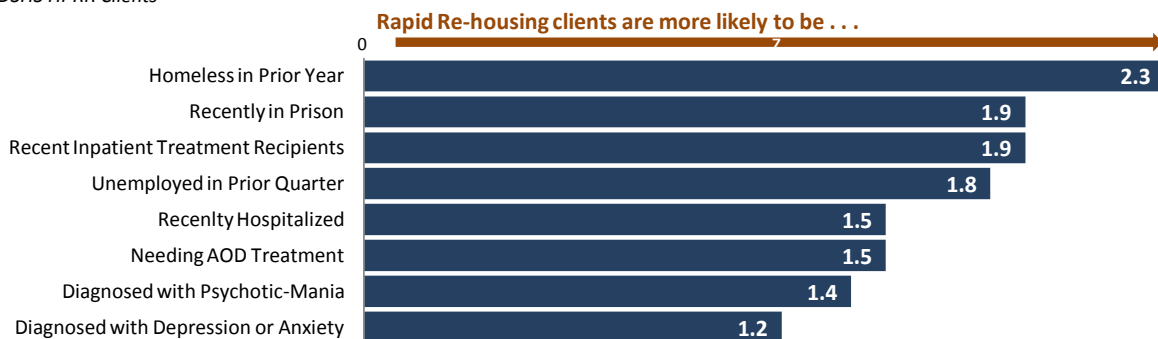
While past analyses have preliminarily examined outcomes regarding housing stability (see RDA Report 11.165), this analysis explores one of the additional outcomes identified to be of key importance in helping end homelessness: specifically, what employment outcomes are associated with rapid re-housing assistance for literally homeless persons. Homelessness Prevention assistance, part of the Commerce HPRR but which serves a significantly different clientele, will be examined in a separate analysis. This report is part of an ongoing collaboration between Commerce and DSHS that examines the experiences of individuals receiving social services, housing assistance or both.³

STUDY POPULATION | 2010 Rapid Re-housing Clients

Of the 43,955 individuals who received housing assistance in calendar year 2010 as recorded in HMIS, 14,788 people received rent or other financial assistance. Of these, 4,849 people were literally homeless at the time they sought rent assistance and were therefore rapidly re-housed into a permanent location. This report focuses on the 1,537 working-age, Rapid Re-housing recipients who gave their consent to have information shared with DSHS via the HMIS written consent form and who appear in the DSHS Integrated Client Database (ICDB) and who were also eligible for publicly funded medical assistance in at least one of the 12 months preceding receipt of housing assistance.

An individual must be literally homeless and meet at least one at-risk criterion to be eligible for Rapid Re-housing assistance.⁴ Other criteria are used to determine eligibility for Homelessness Prevention assistance; however, the individual need only be *at risk* of homelessness, not literally homeless, to receive those services. As we show, this distinction justifies a separate analysis for these two groups of clients.

FIGURE 1
Relative Risks of Recent Adverse Experiences: Rapid Re-housing versus Homelessness Prevention Clients
DSHS HPRR Clients

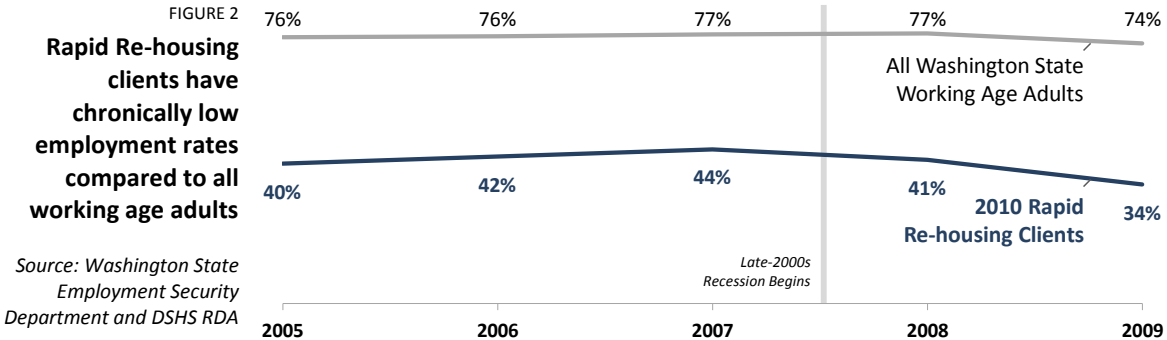


As illustrated in Figure 1, being at-risk of homelessness or literally homeless is associated with significant differences in circumstances. In the year prior to receiving assistance, Rapid Re-housing clients were more than twice (2.3) as likely as Homelessness Prevention clients to have had an earlier bout of homelessness. They were almost twice as likely to have been recently released from prison or a treatment facility or to have been recently unemployed. They were also more likely to have been recently hospitalized, in need of AOD treatment, or diagnosed with a mental health disorder.

³ Restricting the study population to those eligible for medical assistance permits the use of a more detailed set of relevant criteria for selecting a comparison group for the outcomes analysis.

⁴ <http://www.commerce.wa.gov/DesktopModules/CTEDPublications/CTEDPublicationsView.aspx?tabID=0&ItemID=10571&Mid=870&wversion=Staging>.

The focus of this analysis is on employment outcomes associated with participation in the Rapid Re-housing program. HMIS-DSHS Rapid Re-housing clients have a history of underemployment. Working-age adults in Washington State were up to two times as likely to be employed as 2010 HMIS-DSHS Rapid Re-housing clients over the five years prior to their receiving services (Figure 2). Due in part to the economic recession, Rapid Re-housing clients experienced eroding employment rates, falling from 44 to 34 percent from 2007 through 2009.



The pattern of annual earnings and quarters worked closely followed the employment trends shown in Figure 2. On average, 2010 HMIS-DSHS Rapid Re-housing recipients earned about \$2,900 per year and worked 1.06 quarters a year and from 2005 through 2009, with their fewest quarters worked (0.82) and lowest annual earnings (\$2,074) occurring in the last year. Due to the considerable difficulties experienced by these individuals (Figure 1) it is unlikely that Rapid Re-housing assistance alone will result in employment rates experienced by most healthy working age adults. It does, as we show, halt the downward trajectory illustrated in Figure 2.

For this analysis, we identified a group of homeless DSHS clients who did not receive any HMIS services in 2010, but who were statistically identical to HMIS-DSHS Rapid Re-housing clients with respect to employment and earnings history and other key characteristics associated with HPRR eligibility, economic or medical fragility, and demographics.⁵ Individuals were selected based on the following criteria: Five-year employment trajectory, substance abuse need and treatment history, mental health diagnoses, arrests, recent hospitalization, prison, or inpatient treatment stay, chronic illness, receipt of financial and medical assistance, prior episodes of homelessness, and demographics.

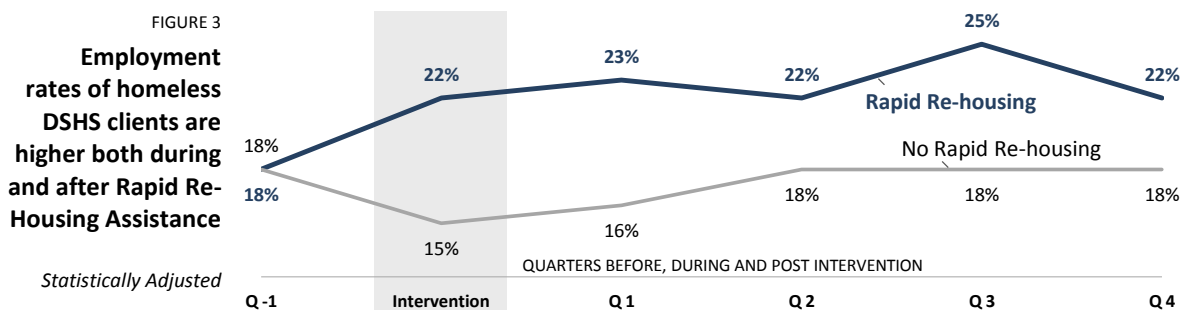
One-to-one matching resulted in an untreated comparison group of 1,537 homeless DSHS clients that looks, in all other respects, almost exactly like those receiving Rapid Re-housing services (Table 1). While there still may be important unobserved differences between the groups, the opportunities for biases that influence employment outcomes have been minimized through matching and further statistical adjustments and control for residual differences in employment and housing history and demographics.⁶ We used the quarter in which they began receiving rapid Re-housing assistance as the starting point (index quarter). For the comparison group, the index quarter was a quarter in which they were literally homeless, selected to match the distribution of index quarters for the Rapid Re-housing group.

⁵ The process used to identify homeless DSHS clients is described in the Technical Notes at the end of this report.

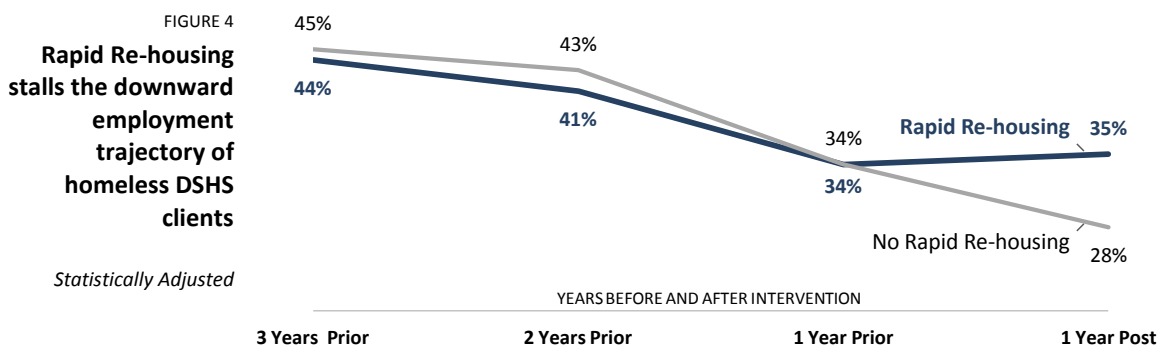
⁶ Logistic regression controlling for residual differences in employment history and other individual characteristics was used to estimate predicted probabilities of employment.

FINDINGS | Employment Outcomes

As illustrated in Figure 3, fewer than 20 percent of HMIS-DSHS Rapid Re-housing and DSHS comparison group clients were employed in the quarter prior to the intervention and there was no significant difference in their employment rates.⁷ During the intervention quarter, however, HMIS-DSHS Rapid Re-housing clients were significantly ($p=0.0001$) more likely to be employed: 25 out of 100 were employed in the intervention group versus 15 out of 100 in the comparison group. While the gap in employment rates diminished over the follow-up year, Rapid Re-housing recipients maintained significantly ($p<.05$) higher employment rates in every quarter.⁸



A multivariate analysis of the likelihood of any employment over the entire follow-up year showed that homeless DSHS clients who received Rapid Re-housing were 1.25 times more likely to be employed (35 percent versus 28 percent) than homeless DSHS clients who did not receive re-housing assistance (Figure 4). Similar patterns held for quarters worked and total earnings over the follow-up year. HMIS-DSHS Rapid Re-housing clients worked an average of .87 quarters during the follow-up year versus .70 for the comparison group and averaged about \$422 more in total earnings.



CONCLUSION | Rapid Re-housing Improves Employment Outcomes for DSHS Clients

Homeless DSHS clients have a history of underemployment and are more likely to have experienced adversities such as hospitalization, substance abuse, prison, and mental illness. Their five-year employment trajectories also reflect a gradually worsening employment situation. Receipt of Rapid Re-housing rent or other financial assistance is associated with statistically significant improvements in employment compared to a similar group of homeless DSHS clients who do not receive Rapid Re-housing assistance. Rapid Re-housing clients are more likely to be employed, earn more, and work more quarters and the downward trajectory in employment outcomes is halted. Future analysis will examine other outcomes that may be associated with Rapid Re-housing assistance, such as arrest and conviction. We will also examine similar outcomes for Department of Commerce Homelessness Prevention clients as more data become available for that analysis.

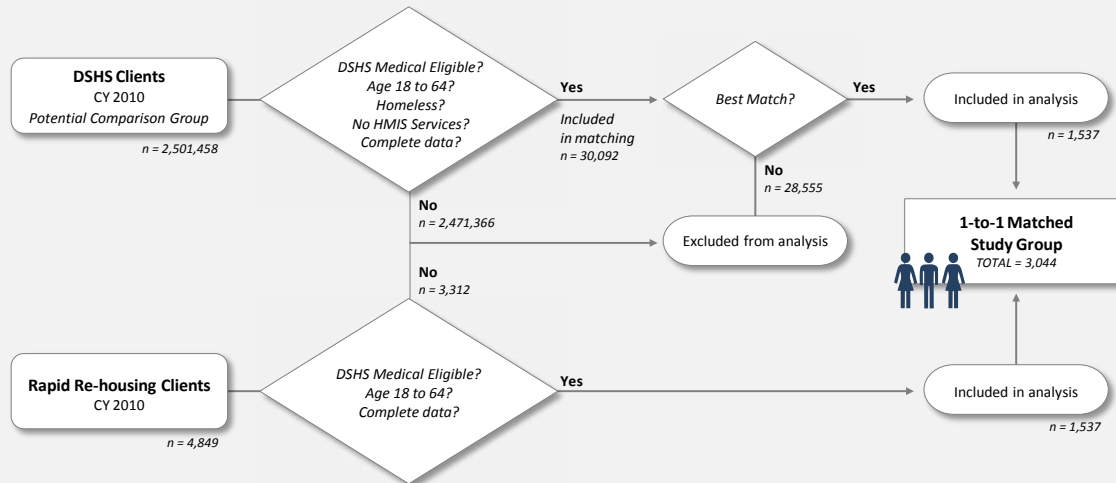
⁷ In addition to the quarter prior to the index event, there were no significant differences in employment rates or earnings of Rapid Re-housing and comparison group clients over the previous five years.

⁸ A logistic regression ($N=3,074$) controlling for demographics, employment history, and other client characteristics was used to derive statistically adjusted employment rates for each follow-up quarter and the entire year. The effect of Rapid Re-housing was statistically significant in every quarter and over the entire follow-up year ($p<.05$).

STUDY POPULATION

This report provides an analysis of working-age adults who received Rapid Re-housing assistance service recorded in the Homeless Management Information System (HMIS) in calendar year 2010 and who were found eligible by DSHS for for Health Care Authority medical coverage (according to Office of Financial Management medical eligibility data) in the preceding 12 months. Based on these and other criteria to be described, the final study population includes 1,537 DSHS Rapid Re-housing clients.

A comparison group of homeless DSHS clients who did not receive Rapid Re-housing services was constructed from a pool of working-age adults who had an indicator of homelessness in CY 2010 according to the DSHS Client Services Database and who did not receive HMIS services that year or over the follow-up period. The following flow diagram illustrates how DSHS Rapid Re-housing and the comparison groups were selected for the study.



DATA SOURCES

- The Homeless Management Information System (HMIS) provided personal identifiers and data on receipt of housing assistance services.
- RDA’s Client Services Database provided data on client demographics, social service use, and a common identifier for linking client information from multiple data sources contained within RDA’s Integrated Client Database (ICDB).
- Office of Financial Management (OFM) eligibility data provided information on whether or not individuals had DSHS medical coverage.
- Washington State Employment Security Department (ESD) Unemployment Insurance wage data provided information on quarterly earnings, which was used to create a measure of employment status (an individual was considered employed if he or she had greater than zero earnings in a year).

MATCHED COMPARISON GROUP

Participation in the Rapid Re-housing program is not a random event, so a one-to-one deterministic matching strategy was used to reduce the risk of selection bias. Of the 30,103 homeless DSHS clients who met the necessary criteria for inclusion in the matching process (see above flowchart), 1,537 were selected based on exact matches by gender and age groupings and then by the best match with respect to all of the variables listed in Table 1.

Variables for the matching process were selected to provide a comparison group with similar demographic characteristics; comparable medical, substance abuse, and psychological profiles; comparably recent episodes of institutionalization (prison, hospital, or inpatient treatment) and homelessness; similar involvement with social services, financial assistance, criminal justice, and child welfare; and similar employment trajectories.

As shown in Table 1 (below), the matching process selected a comparison group that is almost statistically identical to the Rapid Re-housing group. We were unable to identify a comparison group with an identical geographic distribution based on DSHS administrative regions, so the outcomes analysis included additional controls for geography using multivariate statistical techniques.

TABLE 1.

Characteristics of Study Population: Homeless DSHS Working-age Clients with Rapid Re-housing and Comparison Group	With Rapid Re-housing N=1,537	No Rapid Re-housing N=1,537	p-value
Demographics			
Age	35.5	35.4	0.7613
Male	34.4%	34.4%	1.0000
Minority	37.6%	36.9%	0.6815
Characteristics (in the past 12 months)			
Any AOD Treatment Need	31.2%	32.5%	0.4389
Medical Risk Score (Mean)	0.63	0.65	0.7487
Psychotic-Mania Diagnosis	18.3%	18.7%	0.7807
Depression-Anxiety Diagnosis	42.3%	41.0%	0.4643
Hospitalized	11.8%	10.9%	0.3938
Inpatient AOD Treatment	4.9%	4.5%	0.6086
Incarceration (prison)	1.3%	1.2%	0.8720
Recently Released (month before index)*	3.6%	4.2%	0.4038
Months SSI-related Medicaid (Mean)	3.61	3.47	0.4323
Months Medical Care Services (Mean)	0.69	0.71	0.7883
Months ADATSA (Mean)	0.10	0.09	0.5803
Months TANF-related Medical (Mean)	4.46	4.45	0.9187
Months Children's Medicaid (Mean)	0.28	0.23	0.4262
Other Homeless Episode	50.7%	50.7%	0.9712
Child Welfare Involvement	27.5%	28.2%	0.6292
Average Arrests (Mean)	0.31	0.32	0.6999
Employment History			
2005 Earnings (Mean)	\$3,016	\$3,167	0.5227
2006 Earnings (Mean)	\$3,141	\$3,396	0.3022
2007 Earnings (Mean)	\$3,387	\$3,478	0.7231
2008 Earnings (Mean)	\$3,008	\$2,908	0.6703
2009 Earnings (Mean)	\$2,074	\$1,934	0.4547
2005 Quarters Worked (Mean)	1.08	1.12	0.4414
2006 Quarters Worked (Mean)	1.12	1.20	0.1658
2007 Quarters Worked (Mean)	1.17	1.19	0.8057
2008 Quarters Worked (Mean)	1.11	1.07	0.4309
2009 Quarters Worked (Mean)	0.82	0.79	0.4327
Employed in Quarter before Index Event	18.4%	17.6%	0.5416
Quarter before Index Event Earnings (Mean)	\$379	\$335	0.2577
Quarter before Index Event Earnings Hours (Mean)	36.9	33.6	0.4106
DSHS Administrative Region			
Region 1	29.3%	26.2%	.0513
Region 2	33.1%	40.6%	.0001
Region 3	37.6%	33.3%	.0115
*Released from hospital, inpatient treatment, or prison in the quarter before the index event.			



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