Access to Recovery Services Help Contain Medical Costs for Chemically Dependent Clients

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IN 2004, the Substance Abuse and Mental Health Services Administration (SAMHSA) initiated a major initiative, the Access to Recovery (ATR) program, to improve access to substance abuse treatment and recovery services. Washington was one of 14 states that received an initial three-year ($22.8 million) grant to support the development of an ATR program. The national ATR program was renewed in 2007, and Washington was awarded an additional $13.9 million to support treatment and recovery services under the ATR II program through 2010. The six counties that participated in the initial ATR effort in Washington State were: Clark, King, Pierce, Snohomish, Spokane, and Yakima.

The impact of Washington's ATR I program on DSHS fee for service medical costs was assessed for working age disabled clients who were eligible for medical coverage under the aged, blind or disabled (ABD), GAU, or ADATSA programs. Regression analysis was used to compare cost measures for a sample of 1,387 ATR clients and 1,243 matched comparison-group patients (*see Technical Notes*).

Key Findings

How were the ATR funds used?

- Seventy percent of the ATR I funds were used to support recovery services, with the remaining 30 percent used to support treatment services. Clients used ATR funds to purchase a variety of recovery services.
- Thirty-nine percent of the funding used for housing support, 26 percent was used for information and referral and case management.

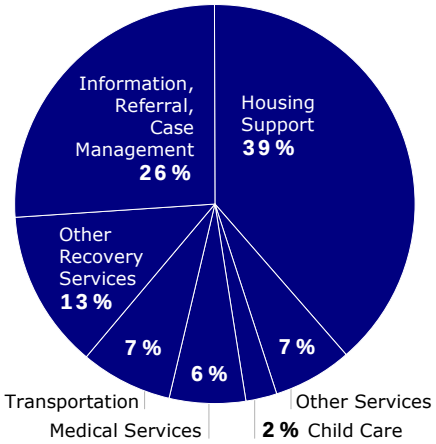
Medical Costs for Working Aged Disabled Clients

Clients who received ATR services had lower ($66) average monthly medical costs compared to clients who did not receive ATR services, though the difference was of borderline statistical significance (p = .11*). When the sample was restricted to clients with 3 or months of GAU, ABD, or ADATSA eligibility in the pre- and post-intervention periods, larger differences in DSHS fee for service monthly medical costs ($136) were observed (p = .05*). Clients were eligible approximately 7 months per year during the study years (*see Technical Notes*).

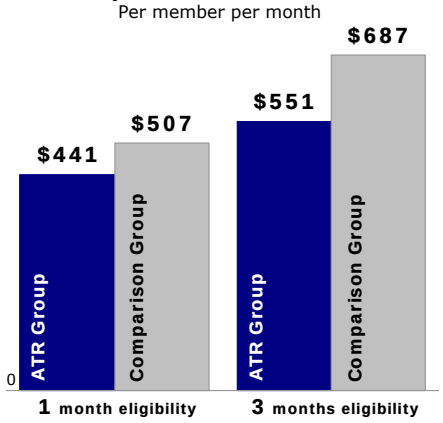
Based on these findings, ATR clients with at least one month of eligibility would have cumulative (annual) cost reductions of approximately $462, while clients with at least 3 months of eligibility would have cumulative (annual) cost reductions of approximately $952 (*second chart, right*).

**One-tailed test*

Distribution of Access to Recovery Funds



Adjusted Medicaid Costs
Per member per month



Other Outcomes Analyzed

Three other measures were examined pertaining to ATR program outcomes: (1) hospital emergency department (ED) per member per month costs, (2) admission to the hospital during the follow-up year, and (3) hospital inpatient costs per member per month. The study population of working age disabled clients made extensive use of the ED for medical care, with 44 percent of the clients having at least one ED visit during the follow-up year. Nine percent of the study population was hospitalized during the follow-up year. Analysis of these additional outcome measures found:

- ATR was associated with a $10 reduction in ED costs per member per month ($p < .05$), and
- There was no difference between clients receiving ATR support services and clients not receiving these services in (1) the likelihood of having an admission or (2) inpatient hospital costs per member per month.

Discussion

This ATR service improvement project documented positive effects of the ATR program on medical costs. It found ATR was associated with a modest reduction ($66) in costs per member per month. The reduction in per member per month cost was greater ($136) for clients who had at least three months of DSHS fee for service medical eligibility in the year before and after the ATR intervention. Further, ATR was associated with a $10 reduction in hospital ED per member per month costs.

Offering needed recovery support services may help clients engage and remain in treatment. Another study conducted as part of the overall ATR service improvement project found that ATR was associated with improved substance abuse treatment engagement and treatment completion. The findings of reduced DSHS fee for service medical costs reported here may reflect the positive effects ATR had on improving clients' engagement in substance abuse treatment.

TECHNICAL NOTES

Study Sample — A multi-step procedure was used to select the treatment and comparison groups for the ATR service improvement project. This procedure relied on propensity score matching and other matching procedures to construct a comparison group that was similar to the treatment group in regard to use of SA treatment services, demographic factors, health risk score, county of residence, Medicaid eligibility and arrest record. Ultimately, this procedure produced two matched groups: a treatment group consisting of 1,387 ATR clients and a comparison-group consisting of 1,243 clients who received SA treatment but not ATR services.

Data and Measures — The primary data source for the ATR service improvement project was the Medicaid claims database, which was supplemented with data from the TARGET data system maintained by the Division of Alcohol and Substance Abuse (DASA). For each of the 2,630 cases included in the ATR service improvement project, Medicaid cost data were gathered on three cost measures, which served as outcome variables for the analysis:

- Total annual Medicaid costs, including physician costs, hospital costs and pharmacy costs,
- Annual Medicaid hospital emergency department (ED) costs, and
- Hospital inpatient costs, not including inpatient physician charges.

A fourth outcome measure was constructed representing hospital admission (yes/no). The 12-month period following initiation of ATR services was defined as the follow-up period for the service improvement project. The pre-intervention (baseline) period was defined as the 12-month period prior to initiation of ATR services. To adjust for differences in Medicaid eligibility, the cost measures were divided by the number of months of eligibility, creating measures representing per-member-per-month costs.

Data were gathered on other variables that served as control variables (covariates) in the analysis. These variables included:

- Age, sex and race (white/non-white),
- Health risk adjustment score,
- Time trend variable representing the index month (start of ATR services),
- Months of Medicaid eligibility in the pre- and post- (12-month) intervention periods, and
- Baseline Medicaid cost in the pre-intervention period.

Statistical Techniques — General linear models were used to analyze the three cost measures listed above and generate estimated (adjusted) Medicaid per-member-per-month costs for the treatment and comparison group, controlling for the covariates listed above. Logistic regression was used to analyze hospital admissions, adjusting for the covariates listed above.

Additional copies of this paper may be obtained from: http://www1.dshs.wa.gov/RDA/ or http://www1.dshs.wa.gov/dasa/ or through the Washington State Alcohol|Drug Clearinghouse by calling 1-800-662-9111 or 206-725-9696 (within Seattle or outside Washington State), by e-mailing clearinghouse@adhl.org, or by writing to 6535 Fifth Place South, Seattle, Washington 98108-0243.
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