

## IMPROVED OUTCOMES FOR CLIENTS WHO RECEIVE ACCESS TO RECOVERY (ATR) SERVICES IN PUBLICLY FUNDED CHEMICAL DEPENDENCY TREATMENT

### A Service Improvement Project

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### ABSTRACT

In 2004, Washington State began providing Access to Recovery (ATR) services to clients receiving publicly-funded chemical dependency treatment. Recovery services included case management and services related to transportation, housing, and medical needs. Payment was made through an innovative voucher system with families accessing an average of \$1,200 of ATR services. This fact sheet summarizes results of an analysis carried out to assess the impact of the ATR program.

### Key Findings

- ATR services were associated with a number of positive outcomes including increased length of stay in treatment, increased likelihood of completing treatment and an increased likelihood of becoming employed.
- The beneficial effects of ATR services on treatment retention were most pronounced when they were provided between 31 and 180 days after a client began treatment.

### Conclusion

Taken together, results of the analyses reported here offer evidence for the value of ATR services.

## FACT SHEET

Access to Recovery (ATR) is a Presidential initiative and 3-year competitive grant program to States, Territories, and Tribal Organizations and is funded by the Substance Abuse and Mental Health Services Administration (SAMHSA). The purpose is to provide recovery services to individuals in crisis who have also been identified as having an alcohol or other drug abuse or dependency problem. The intent of the program was to assist these individuals in supporting their recovery and becoming productive members of their communities. An important component of ATR was that clients were given a choice in the services and the provider of those services, both secular and non-secular, to assist them in their recovery.

In 2004, fourteen states and one tribal organization were awarded ATR grants. Washington State was one of these states and the Washington State Division of Alcohol and Substance Abuse (DASA) was charged with implementing the program. The first phase of ATR in Washington State was funded for the time period of September 2004 through October 2007 and was implemented in six counties: Clark, King, Pierce, Snohomish, Spokane, and Yakima. Payment was made through an innovative voucher system. On average, families accessed recovery services worth \$1,200 with their ATR vouchers.

The Center for Healthcare Improvement for Addictions, Mental Illness and Medically Vulnerable Populations (CHAMMP) located at the University of Washington at Harborview Medical Center was commissioned by DASA to carry out a Service Improvement Project to assess the impact of the ATR Program on client outcomes. Outcomes included employment and treatment engagement (length of stay and treatment completion). This information was obtained from administrative data sources. The primary focus of the CHAMMP analysis was to estimate the added value of ATR services over and above the impact of chemical dependency treatment. This was done by comparing outcomes of clients who received both ATR services *and* publicly-funded chemical dependency treatment services with clients who were similar but who only received chemical dependency treatment services (and no ATR services). Only clients who were receiving outpatient, publicly-funded chemical dependency treatment services were included in the analysis.

### **Type of ATR Services Received**

During the three-year funding period, 11,801 clients received an ATR-paid service. A wide variety of services were made available. Virtually all ATR clients received some form of case management, about two-thirds also received transportation services, about 59% received services related to housing, 20% received medically-related services, and approximately 67% received other services. Analyses are presented here for ATR clients for whom we have complete and mature data and matched comparison clients.

## Client Characteristics

ATR clients (n=3744) *did not* differ from comparison clients (n=3744) in:

- gender (49% female across both groups),
- functional language (95% English),
- years of education (51% less than 12 years, 27% 12 years, 22% more than 12 years ),
- highest degree earned (32% none, 54% high school/GED, 6% vocational , 8% college),
- reported past year use of a variety of medical or mental health services (82% with no general medical inpatient admissions in last year; 95% with no mental health inpatient services in past year; 50% with no general medical outpatient visits, 31% with 1 to 4, and 19% with 5 or more; 53% with no emergency department visits)
- reported presence of a disability (92% with no disability),
- reported criminal justice involvement in past year (72% involved),
- reported number of quarters worked in past year (50% with no quarters worked),
- reported frequency of alcohol/drug use (65% with no use in the last year), or
- reported age at first use of alcohol/drugs (17% under 12, 42% between 12 and 17, 42% at 18 or older).

On the other hand, ATR clients *did differ* from comparison clients on a number of characteristics. Relative to the comparison group, *ATR clients were more likely to:*

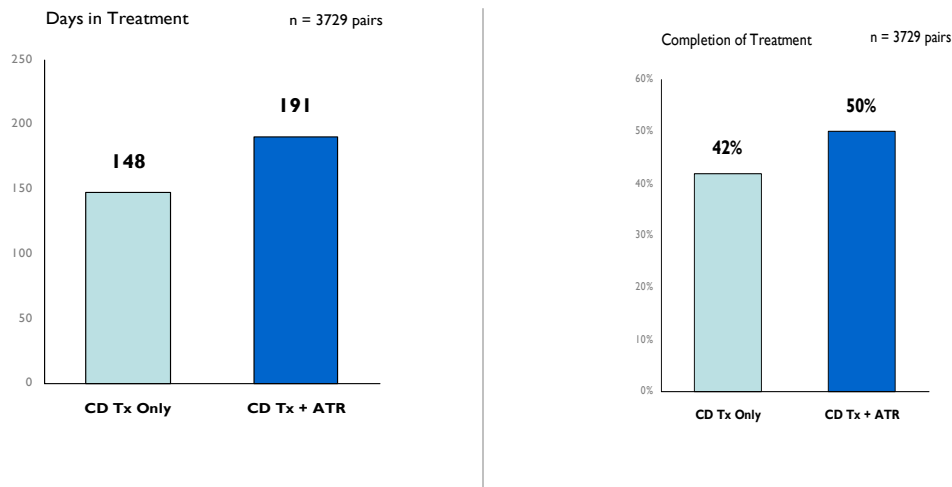
- be older ( 36 vs. 35 years ),
- White (66% vs. 63%),
- unemployed (22% vs. 19%),
- unmarried (21% vs. 18%),
- have used “hard” drugs (41% vs. 37%),
- have no household income (32% vs. 27%), and
- live in a location other than a personal residence (27% vs. 21%).

Although statistically significant, these differences between groups were for the most part modest with maximum differences less than 6%. Considering that clients were not randomly assigned to ATR services, it is not surprising that they might differ from comparison clients on selected measures. However, taken together, the differences reported between groups appear to be of relatively little practical significance.

## KEY FINDINGS

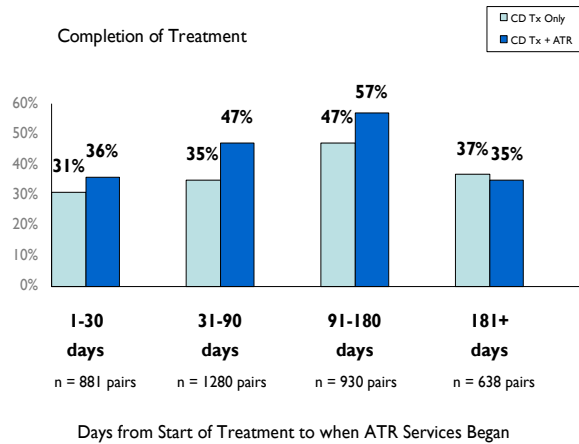
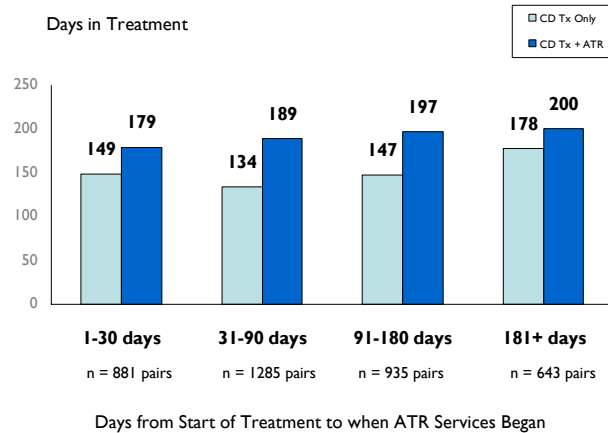
Results indicate that receipt of ATR services was associated with longer stays in treatment, a higher likelihood of completing treatment, and a higher probability of employment for those with no earnings reported in the year prior to treatment. For clients with an employment history, ATR was also associated with a higher probability of subsequent employment but the effect was marginally significant and relatively small in magnitude. These findings are discussed in more detail below.

**On average, ATR clients stayed in treatment 43 days longer ( $p < .05$ ) and were more likely to complete chemical dependency treatment than non-ATR clients ( $p < .05$ ).**



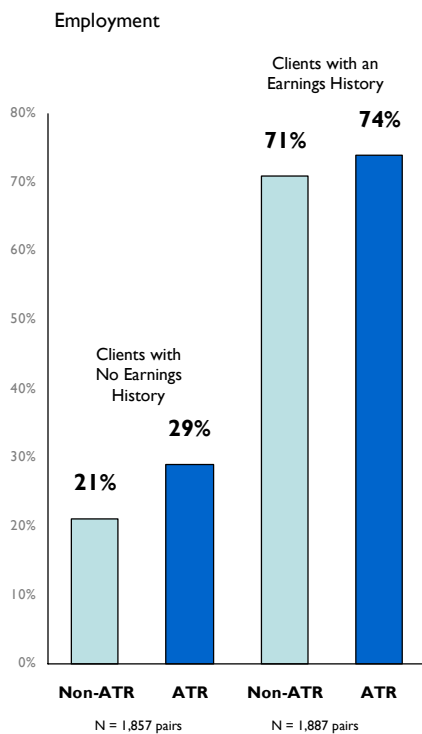
Longer stays in treatment and treatment completion are important because both are associated with more positive outcomes such as reduced arrests (Campbell et al, 2007; Garnick, 2007; Luchansky, 2006), increased employment (Luchansky et al, 2000; The TOPPS II Interstate Cooperative Study Group, 2003; Wickizer et al 2000), and reduced medical costs (Maynard et al, 1999; Wickizer et al, 2006).

**The beneficial impact of ATR on length of stay in treatment is most pronounced among clients who received their first ATR services between 31 and 180 days following admission to treatment. A similar effect is seen in treatment completion but, in this case, the effect is most pronounced for clients who received their first ATR service between 1 and 180 days following admission to treatment ( $p < .05$ ).**



Based on this finding, it appears that providing ATR services may be more effective and have a greater impact on facilitating recovery when initiated after one full month of treatment. Since ATR is a relatively new program, this finding offers useful guidance for optimizing the benefits of ATR services. Future research could refine this finding even further in order to better target the relatively scarce ATR resources. The original ATR program (on which this paper is based) was followed by ATR II in Washington State. In ATR II, consistent with the findings reported here, recovery services are provided to clients only after completion of the first month of treatment.

**Receipt of ATR services was associated with a greater likelihood of employment in the 3 quarters following the index quarter<sup>1</sup> irrespective of a client's earnings history (p<.05).**



Among clients *with no earnings history* in the prior year, the odds of an ATR client becoming employed during the 3 quarters following the index quarter was 1.6 times greater than non-ATR comparison clients.

Approximately 50% of clients in the sample studied here had no earnings history in the prior year (i.e., 1,857 pairs). Thus, this finding appears to have both practical as well as statistical significance.

Previous studies show that, although participation in chemical dependency treatment is associated with increased likelihood of subsequent employment, clients most likely to become employed are those *with* a recent employment history (TOPPS II Interstate Cooperative Workgroup, 2003; Wickizer et al, 2000). So it is particularly noteworthy that receipt of ATR services may be associated with positive employment outcomes among those *without* a recent employment history

Among clients *with an earnings history*, employment differences between ATR clients and non-ATR comparison clients were marginally significant and relatively small in magnitude.

## CONCLUSIONS

- ATR services were associated with a number of positive outcomes including increased length of stay in treatment, increased likelihood of completing treatment and an increased likelihood of becoming employed.
- The beneficial effects of ATR services on treatment retention were most pronounced when they were provided between 31 and 180 days after a client began treatment.
- Taken together, results of the analyses reported here offer evidence for the value of ATR services.

<sup>1</sup> The index quarter was the quarter in which ATR clients first received ATR services. Each comparison client was assigned an index date that was parallel to the ATR client with whom they were matched.

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## **TECHNICAL NOTES**

### **Study Population**

The study population included all adults who received ATR services between 1/1/05 and 12/31/06 who were also simultaneously participating in outpatient chemical dependency treatment services, a total of 4,278 clients. This group was designated, “ATR clients”. In addition, a comparison group was constructed from the pool of clients who received outpatient chemical dependency treatment during this same time period but who did not receive ATR services. Ultimately, a comparison client was matched 1 to 1 with an ATR client, resulting in a total of 4,278 comparison clients. The protocol for comparison group construction can be obtained from the first author (Toni Krupski, PhD, Krupski@u.washington.edu).

### **Data Sources**

Data sources included the Treatment and Report Generation Tool (TARGET) which contains a record of publicly funded chemical dependency treatment and is maintained by the Washington State’s Division of Alcohol and Substance Abuse (DASA); and the Washington State Employment Security Department (ESD) which maintains historical employment/earnings data on persons employed in Washington State.

### **Analyses**

For descriptive statistics associated with continuous variables (e.g., length-of-stay, earnings, difference in earnings), paired t-tests were used to evaluate the statistical significance of group difference in mean values. For dichotomous categorical outcomes (e.g., treatment completion, any earnings, any arrests), multivariate conditional logistic regression was used. Predictors in the conditional logistic regression model included ATR status (e.g., ATR recipient vs. control) as well as any potential covariate (see listing of potential covariates below) where bivariate analysis revealed a statistically significant relationship between the covariate and outcome in question.