research Brief

Con-Quest

*Outcome Evaluation of a
Residential Substance Abuse Program*

Substance Abuse Therapeutic Communities

The therapeutic community model for treatment of substance abusers has existed for 40 years. The community is a drug-free residential setting where abusers progress through a hierarchy of levels and responsibilities. The community is managed through peer accountability and responsibility, typically with the assistance of skilled therapists. In this way, abusers not only receive assistance with addiction, but they also learn social norms and develop pro-social skills.

The Utah Department of Corrections operates three substance abuse therapeutic community programs within the prison system. Con-Quest (Draper) and Hope (Gunnison) provide treatment for male inmates, and Ex-Cell (Draper) provides treatment for female inmates. Each community closely follows this long utilized treatment model. Substance abuse therapists work with the inmates on the housing units, with individual offenders, and in group settings. Correctional officers provide safety and security within these housing units.
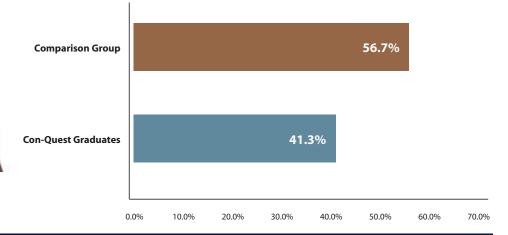
When evaluating the proportion of Con-Quest graduates who returned to prison within 18 months compared to a group of offenders who did not participate in a substance abuse therapeutic community, the graduates performed better with 41.3% returning to prison compared to 56.7% in the comparison group. This reflects a 37.3% improvement.

Figure 1: Percent of Offenders Returning to Prison within 18 Months

Comparison Group: 56.7%
Con-Quest Graduates: 41.3%

0.0% 10.0% 20.0% 30.0% 40.0% 50.0% 60.0% 70.0%

Within these programs, residents live in a dormitory community and progress through levels based on their progress in treatment and development of good social skills. Residents hold each other accountable, using a relay system to report problematic behavior of other residents. The resident exhibiting the problematic behavior is held accountable by the other residents of the community, or, in some instances, by treatment or security staff.

RESEARCH METHOD

Department research staff conducted a quasi-experimental, non-equivalent group outcome evaluation of the Con-Quest program at the Draper prison site. A common barrier in conducting research in a criminal justice setting is the inability to randomly assign subjects into control and experimental groups. This is dominantly an ethical issue related to denying treatment to individuals for the purpose of conducting research. Additionally, legal control, from the courts or the Board of Pardons and Parole create another barrier. Without random assignment validity threats will surface in the research design.

In conducting quasi-experimental designs, the primary objective of the researcher is to ensure the experimental group (those receiving treatment) and the comparison group (those not receiving treatment) is as similar as possible. More importantly, researchers must consider those factors that might be creating outcome differences between the groups, instead of the treatment itself. For example, if the experimental group is much older in age than the comparison group, we may find outcome differences that are really more related to the offender's age than to any treatment he may have received.

In the current outcome evaluation, researchers employed a new technique called propensity score matching. This is a statistical technique that uses advanced processes to match comparison group members to experimental group members. Using logistic regression, researchers incorporate factors, or variables, into the model that might influence outcomes. The model considers these factors and identifies those that predict whether or not the offender would be found in the experimental, or treatment, group. Once the relevant factors are identi-

fied, the procedure then uses these factors to create the best match from the control pool for each individual in the experimental group.

For the evaluation of the Con-Quest program, the variables that were included in the logistic regression process included offender age, minority status, disciplinary behavior while incarcerated, primary offense severity/offense type, LSI (Level of Service Inventory) category, treatment priority, and prison security level. After conducting the logistic regression analysis, each of these factors were included for matching purposes. The next stage matched, one by one, an offender from Con-Quest with an offender from the control pool based on these matching variables.

The experimental group included 395 offenders who successfully completed the Con-Quest program and had a minimum of 18 months of potential community exposure on parole. This 18-month window created the time frame in which researchers evaluated recidivism behavior.

The control, or comparison pool, included over 2,000 offenders who had a primary goal in their Offender Management Plan for substance abuse treatment. Similar to the experimental group, these offenders had to have a minimum of 18 months of exposure in the community. Members of this pool were never exposed in any way to any substance abuse therapeutic community program. Any member of the comparison pool that had an ICE (Immigration and Customs Enforcement) detainer was also removed from the pool. The resultant pool is the group that was matched with individuals from the experimental, or Con-Quest, group.

For purposes of this outcome evaluation, recidivism was defined as a return to prison, for any reason, during the 18-month window. Offenders were assessed to determine if they returned to prison after their parole. If the offender returned to prison, a date comparison was conducted to determine if that return occurred within 18 months of initial release. If the return was within the 18-month window, the offender was considered unsuccessful. If there was a return to prison but it occurred beyond the 18-month window, for purposes of this analysis, the offender was considered successful.

Table 1: A comparison of the characteristics of Con-Quest graduates and a comparison group

	Con-Quest	Comparison
		(Averages)
Age	40.5	39.9
Offense Severity/Primary Offense	9.24	8.94
Prison Security Level	4.64	4.62
Disciplinaries in Prison	0.42	0.53
LSI Category	2.87	2.85

RESULTS

After conducting the propensity score matching process, 790 offenders were included in the analysis data set. Of these, 395 were in the experimental, or Con-Quest, group, and 395 were in the comparison group.

Table 1, above, demonstrates the comparability between the two groups included in the study. On the key variables considered for the matching process, researchers found strong comparability. This comparability is important because it assists in ruling out the influence these factors may have played in terms of any outcome differences between the groups. Because these values are so similar, it is unlikely they played any influencing role in this particular analysis.

The average age of the Con-Quest group was 40.5 years of age, while the average age of the comparison group was 39.9 years of age. This represents, on average, less than one year of age difference. The average LSI category for the comparison group was 2.85, while the average LSI category for the Con-Quest group was 2.85. This represents only a 0.02 point difference between groups. These similarities are found throughout Table 1. Again, this simply demonstrates the comparison group and the experimental group (Con-Quest graduates) were incredibly similar. The groups were especially similar in those areas that could explain the difference in the outcomes between the two groups. Based on the similarities between groups, the researchers are confident the

improved performance demonstrated by the Con-Quest graduates are real.

The final outcome assessment simply compared the 18-month recidivism data between the Con-Quest group and the comparison group. The analysis revealed that 41.3% of the Con-Quest graduates had returned to prison within 18 months, compared to 56.7% of the control group returned to prison within 18 months. This amounts to a 37.3% difference between the two groups which is statistically significant (calculated as 56.7% - 41.3% divided by 41.3%).

Outcome differences of this magnitude strongly indicates the Con-Quest substance abuse treatment program effectively reduces recidivism. Based on the similarity obtained between the experimental group and the control group, we are confident the differences in outcome exist.

Researchers implemented the 18-month recidivism window in order to establish consistency among correctional outcome research forthcoming. For many programs operated by the department, establishing a larger window would limit the sample size that could be accessed.