

A Brief Summary of Methods

The State of Alaska's Division of Alcoholism and Drug Abuse determined in late 1993 that objective and empirical outcome data on publicly funded chemical dependency treatment patients was needed to *make informed treatment policy and financial decisions based on empirical data rather than qualitative judgments without data.*

The Sample

Beginning in January 1994, the study assessed over 1500 consenting patients at admission, discharge, and six and twelve months after admission to treatment. At the end of this study, there are 1024 residential/step-down patients and 510 outpatients who have consented to participate in the study.

These 1534 consenting patients from 13 facilities were chosen to be representative of a consecutive admission convenience sample of all ethnicities (both Alaska native and non-native) of people seeking publicly-funded chemical dependency treatment in Alaska. These 13 facilities are from geographically representative areas of Alaska and include treatment facilities from the Anchorage, Barrow, Bethel, Craig, Dillingham, Fairbanks, Healy, Juneau, Kenai, Ketchikan, Nome, and Wasilla areas.

The residential/ step-down treatment group is made up of patients who received only residential chemical dependency treatment, and/ or some combination of residential and outpatient/day hospital treatment. The outpatient treatment group is made up of patients who received only day or evening outpatient, or day hospital treatment, but no residential treatment.

The Study Designs, Methods, and Measures

The Alaska Outcome Study (AOS) was designed to assess any change in various areas of patients' lives that may be due to the chemical dependency treatment they received. To achieve this, Intake, Admission and History forms were designed to provide comprehensive pretreatment baseline assessments of many different key sociodemographic, clinical (including substance use, antisocial and depressive) symptom profile and severity, vocational functioning, health care utilization, and legal factors. These measures were necessary to provide a starting point against which to measure improvements in functioning assessed from data gathered at the follow-up interviews six and twelve months after admission to treatment. A Discharge form measures key treatment process variables such as treatment completion, length

of stay, chemical use during treatment, family participation in treatment, and postdischarge referrals.

Finally, at six and twelve months after admission to treatment, the patient receives a phone call from professionally-trained phone surveyors at NSI in St. Paul, Minnesota. Each of these phone interviews is between 5 and 10 minutes long and contains information about patient satisfaction with treatment, the patient's sobriety status and chemical use in the past six months, the obstacles to the patient's recovery, vocational functioning, health care utilization, legal problems, and depressive symptoms.

If, for some reason, interviewers were unable to contact the patient for the six-month interview, attempts were still made to contact the patient for the twelve-month interview.

The initial baseline data collection began in February 1994 and was extended through March 1997.

Final Status of the Study

As of April 1996, 1024 residential patients and 510 outpatients had consented to the follow-up study. NSI successfully contacted 42% of the eligible residential patients and 54% of the eligible outpatients one year after admission to treatment. These contact rates are consistent with other CATOR studies involving largely rural, publicly-funded populations.

The one-year outcome results provide a psychosocial and clinical profile of the residential and outpatient groups, as well as important job, medical, and legal cost-offsets impacted by treatment. These outcomes are comparable to those of other publicly funded programs.

**Alaska Division of Alcoholism and Drug Abuse
Chemical Dependency Treatment Outcome Study**

**Clinical Fact Sheet 2
July 1998**

Summary of Contact Bias

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Contact bias for the 6-month and 12-month interviews was minimal. Among other publicly funded programs in general, contact bias has ranged from minimal to substantial. The fact that the contact bias is minimal for the current study suggests that the outcomes measured through the follow-up interviews are representative of the entire population that originally consented to participate.

The following table presents a demographic comparison of patients who were not contacted with those who were contacted at 6 and 12 months.

Note: The category “Ungrouped” in the Chemical Dependency Hierarchy represents those patients who did not endorse sufficient symptoms to suggest dependence on a particular substance.

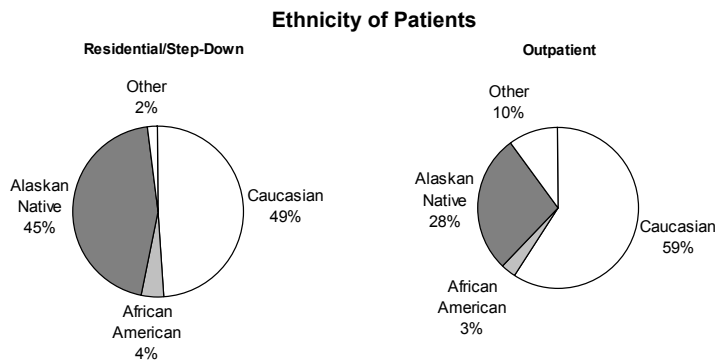
	No Contact	6 Months	12 Months
Gender			
Male	66%	62%	61%
Female	34%	38%	39%
Age			
20 & Younger	4%	6%	5%
21 – 40	75%	76%	76%
41 – 60	20%	18%	19%
61 & Older	1%	1%	1%
Degree			
None	26%	24%	23%
Diploma/GED	54%	56%	57%
Vo-Tech	14%	15%	15%
Associate	4%	4%	3%
Bachelor	3%	2%	2%
On Disability or Welfare			
No	76%	76%	77%
Yes	24%	24%	23%
Ethnicity			
Caucasian	46%	45%	47%
African American	7%	5%	3%
American Indian	3%	2%	3%
Athabaskan	8%	7%	7%
Tlingit	3%	5%	4%
Haida	1%	1%	1%
Aleut	4%	5%	5%
Inupiat	12%	12%	12%
Yupik	8%	12%	9%
Tsimshian	1%	1%	1%
Other AK Native	2%	2%	2%
Other	4%	3%	4%
Occupational Status			
Professional/Technical	8%	7%	7%
Manager/Admin/Buss	3%	3%	3%
Sales	5%	4%	5%
Clerical/Office Worker	8%	10%	9%
Craft/Skilled/Guide	17%	15%	16%
Transp/Equip Operator	4%	5%	5%
Non-Farm Labor	25%	23%	25%
Domestic Worker	6%	5%	6%
Service Worker	9%	10%	9%
Farm Labor	0%	0%	0%
Military Service	1%	0%	0%
Subsistence	3%	4%	4%
Other	11%	13%	13%
Chemical Dependency Hierarchy			
Ungrouped	26%	24%	26%
Alcohol Only	37%	41%	42%
Prescription Drugs	1%	0%	1%
Marijuana	15%	15%	15%
Stimulants	1%	0%	0%
Cocaine	19%	17%	14%
Opiates	2%	1%	1%

Demographic and Clinical Profile

The Alaska Division of Alcoholism and Drug Abuse treatment outcome study, designed to measure the effectiveness of publicly-funded residential and outpatient treatment began in February 1994. This study assessed 1024 residential/step-down patients and 510 outpatients who consented to assessments at admission, discharge, and six and twelve months after admission to treatment.

Demographic Profile of Patients

The outpatient sample contained a higher proportion of Caucasians than the residential/step-down program; the residential/step-down program included a higher proportion of Alaska Native Peoples (primarily Yupik and Inupiat).



English was the primary language of both samples (89% residential/step-down and 90% outpatient). A higher proportion of outpatients were male (69% vs. 56%), married (23% vs. 18%), educated past high school (24% vs. 16%), and employed full-time (49% vs. 20%) than residential/step-down patients. Outpatients were also slightly older, with 21% vs. 18% falling in the 41-60 year range.

A lower proportion of outpatients were unemployed (30% vs. 50%), received disability compensation (5% vs. 8%), and welfare (17% vs. 22%) than residential/step-down patients.

The largest percentage within both the residential/step-down sample (19%) and the outpatient sample (25%) listed their primary job as a non-farm laborer. Fifty-five percent of the outpatients had a family income below \$20,000, as did 58% of the residential/step-down patients.

Referral sources also differed between residential/step-down patients and outpatients. Whereas 62% of outpatients were court ordered, only 45% of residential/step-down patients were. At the same time,

49% of residential step-down patients were self-referred compared to only 27% of the outpatients.

The proportions of self-paying patients were comparable (64% residential/step-down vs. 65% outpatient).

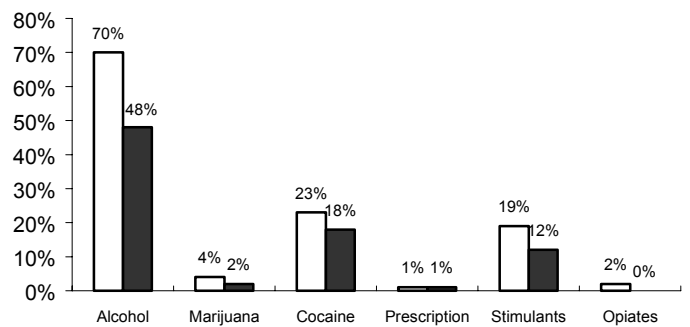
Forty-five percent of the outpatients reported entering treatment because they were arrested for DWI/DUI. This compares with only 28% of the Residential/Step-Down patients.

Clinical Profile of Patients

In general, the residential/step-down patients enter treatment with higher levels of chemical use symptom severities, illicit drug use and other co-existing problems than the outpatient sample.

Sixty-three percent of the outpatients were classified as low in severity, compared to 56% of the residential/step-down patients. Twenty-four percent of the residential/step-down patients were classified as either moderately high or high, compared to only 14% of the outpatients.

Alcohol dependence was reported among 70% of the residential/step-down patients and 48% of the outpatients. Twenty-three percent of residential/step-down clients were marijuana dependent compared to 18% of outpatients. Nineteen percent of residential/step-down patients were dependent on cocaine compared to 12% of outpatients.



A higher proportion of residential/step-down patients received prior treatment for chemical dependency (62% vs. 48%) and depression (27% vs. 19%) than outpatients.

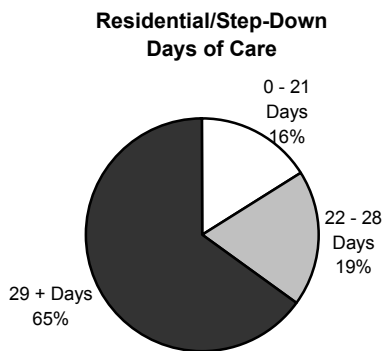
A significant proportion of each sample reported physical and sexual abuse; 10% of the residential/step-down patients and 8% of the outpatients reported incest by a male relative. Twenty-eight percent of the outpatients and 29% of the residential/step-down patients reported physical abuse prior to age 18.

Treatment Profile

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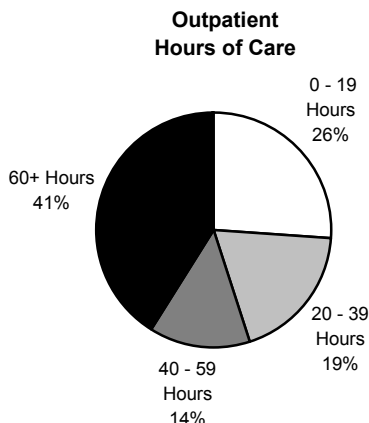
Inpatient and Outpatient Care

Residential/Step-Down patients received an average of 39 days of inpatient care.



Approximately 50% of the patients received at least this amount. In all, 65% received more than the 28 days of care historically found in traditional inpatient programs. Of those who received more than 28 days, 44% remained abstinent for a full year following treatment.

The vast majority of Residential/Step-Down patients did not receive outpatient care (94%). Of those who did, 38% received less than 10 hours of outpatient care either before or after residential treatment.

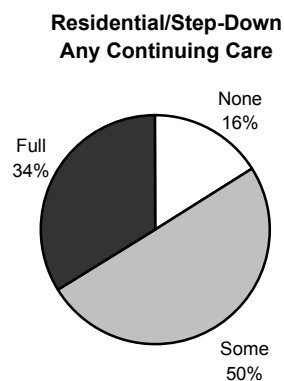
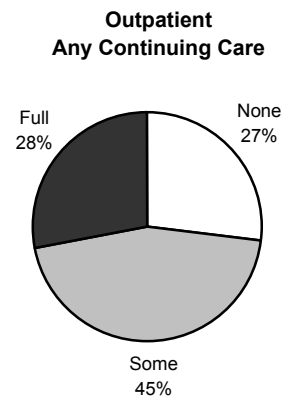


Outpatients received an average of 59 hours of care. Forty-one percent received more than 59 hours, with most (35%) receiving 70 hours or more. Seventy-nine percent of those with 70 or more hours of care were abstinent for a full year following treatment.

Continuing Care

Thirty-eight percent of outpatients and 55% of residential/step-down patients report attending some formal aftercare program over the full year.

At the same time, 70% of outpatients attended some form of peer support group (e.g., AA, etc.) at least sporadically throughout the first year after treatment, as did 79% of Residential/Step-Down patients.



In all, 73% of the outpatients and 84% of the Residential/Step-Down patients reported attending some form of continuing care during the year following treatment. Among those with full attendance, 64% of residential/stepdown patients and 74% of outpatients were abstinent for a full year following treatment.

Job Cost-Offsets

The Alaska Division of Alcoholism and Drug Abuse treatment outcome study, designed to measure the effectiveness of publicly-funded residential and outpatient treatment began in February 1994. This study assessed 1024 residential/step-down patients and 510 outpatients who consented to assessments at admission, discharge, and six and twelve months after admission to treatment.

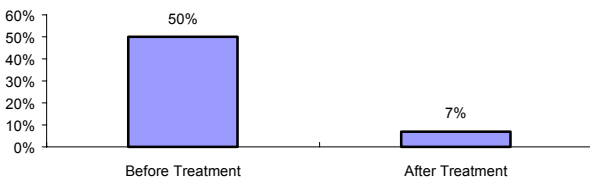
Employment rates changed dramatically from pretreatment through one year after treatment. Full-time employment increased from 30% before treatment to 45% at twelve months. Conversely, unemployment rates dropped from 45% to 24%. *Patients from both the Residential/Step-Down program and the Outpatient program improved in job functioning one year posttreatment*

Residential/Step-Down Patients

Residential/Step-Down patients improved in all areas of job functioning, with the exception of making mistakes and getting injured at work. With the significant drop in missed days of work, patients had greater opportunity to experience other types of job problems. For example, injury rates increased slightly from 4% to 9%, and making mistakes remained constant at 16% before and after treatment.

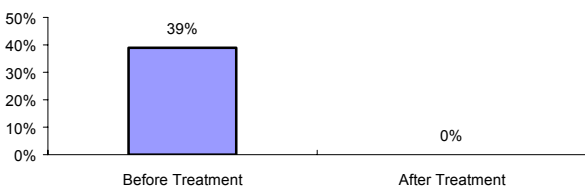
As shown in the figures, working while under the influence decreased dramatically one year

**Working While Under the Influence
 Residential/Step-Down Patients**



posttreatment.

**Working While Under the Influence
 Outpatients**



Job Functioning One Year Posttreatment

	Residential/Step-Down	
	Before Treatment	One Year Posttreatment
Problems With Supervisor	18%	13%
Problems Getting Job Done	11%	9%
Making Mistakes	16%	16%
Missing Work	35%	10%
Being Late to Work	30%	11%
Absent During the Past Month	33%	14%
Injured at Work	4%	9%

Outpatients

Outpatients also improved dramatically in terms of working while under the influence, as shown in the figure below. Outpatients improved in all areas of job functioning except getting injured at work and being absent from work.

Four percent of the patients in this sample reported getting injured on the job before treatment; six percent reported getting injured in the year after treatment. This slight increase may be attributable to any number of external factors, including seasonal variations in jobs.

Job Functioning One Year Posttreatment

	Outpatients	
	Before Treatment	One Year Posttreatment
Problems With Supervisor	16%	8%
Problems Getting Job Done	16%	4%
Making Mistakes	14%	6%
Missing Work	10%	2%
Being Late to Work	16%	2%
Absent During the Past Month	16%	16%
Injured at Works	4%	6%

These results support the notion that substance abuse exacts a heavy toll in terms of workplace productivity and directly translates into dollars lost by the employer. They further suggest that successful treatment is strongly associated with an enduring reduction in those workplace costs related to substance abuse.

Medical Cost-Offsets

The Alaska Division of Alcoholism and Drug Abuse treatment outcome study, designed to measure the effectiveness of publicly-funded residential and outpatient treatment began in February 1994. This study assessed 1024 residential/step-down patients and 510 outpatients who consented to assessments at admission, discharge, and six and twelve months after admission to treatment.

Patients from both the Residential/Step-Down and Outpatient programs improved in medical utilization one year posttreatment

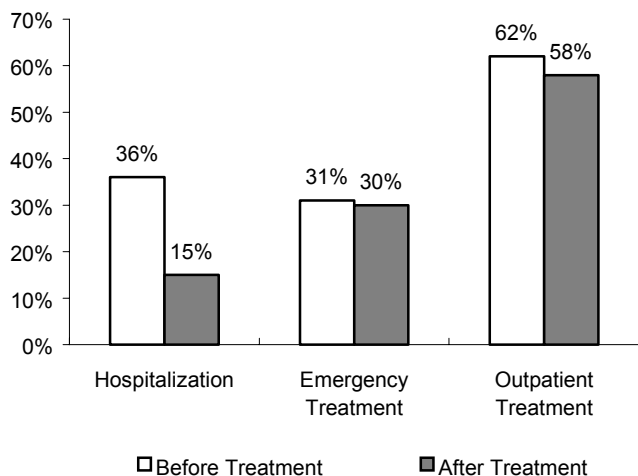
Overall, females tend to utilize more medical services. This is most pronounced with outpatient medical services. Females also tended to report larger reductions in all types of medical care utilization as compared to males on year post-treatment.

Residential/Step-Down Patients

Among residential/step-down patients, hospitalization rates one year after treatment were substantially lower as compared to before treatment. However, as shown in the figure below, there was effectively no decrease in emergency care utilization (males decreased from 31% to 27%, while females increased from 29% to 33%), and the change in outpatient healthcare utilization was slight.

Overall, male patients reported less utilization in all service areas following treatment. With the exception of emergency services, females reported similar decreases in healthcare utilization.

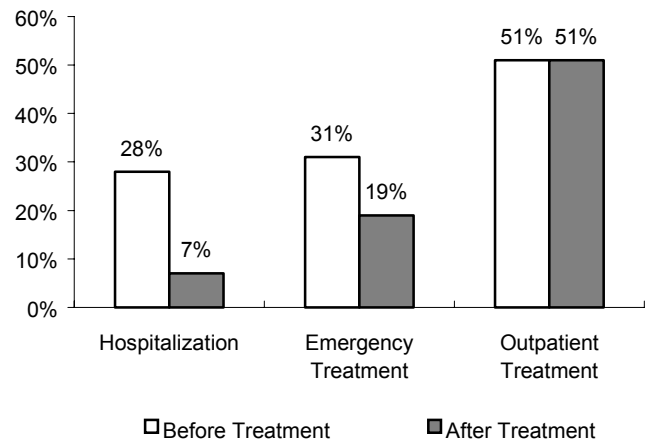
**Medical Utilization Cost-Offsets
 Residential/Step-Down Patients**



Outpatients

There were substantial reductions in hospitalizations and emergency care among patients who received outpatient chemical dependency treatment. There was a slight increase in outpatient healthcare utilization among males (46% before treatment to 48% after treatment) and a slight decrease among females (62% before treatment to 59% after treatment).

**Medical Utilization Cost-Offsets
 Outpatients**



The slight reductions in outpatient healthcare utilization accompanied by dramatic reductions in hospitalizations and emergency care support the notion that following treatment there is a laudable shifting of medical utilization away from costly hospital and emergency room "crisis" or urgent care, towards more timely and appropriate preventive or routine outpatient treatment.

Legal Cost-Offsets

The Alaska Division of Alcoholism and Drug Abuse treatment outcome study, designed to measure the effectiveness of publicly-funded residential and outpatient treatment began in February 1994. This study assessed 1024 residential/step-down patients and 510 outpatients who consented to assessments at admission, discharge, and six and twelve months after admission to treatment.

Both the Residential/Step-Down and Outpatient program patients reported reductions in legal problems one year posttreatment.

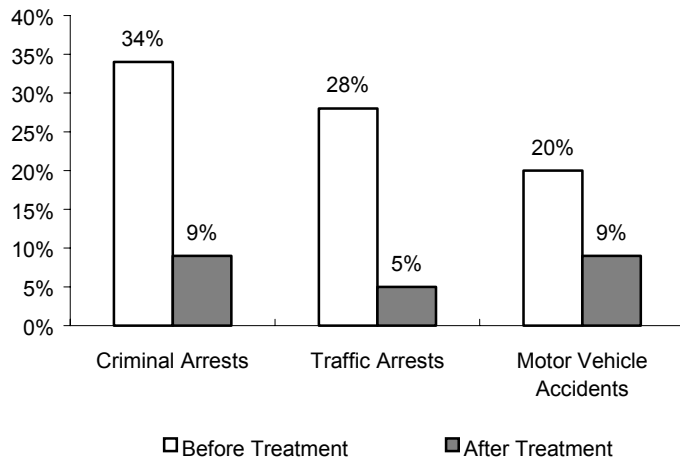
Aggregate CATOR analyses have documented substantial post-treatment changes or reductions in legal involvement. These changes were found to hold for Alaska patients as well.

These measures of legal involvement are reflective of the impact alcohol and drug use has on public safety; thus any declines are beneficial not only to the patients themselves, but also members of the community at large.

Residential/Step-Down Patients

Residential/step-down patients decreased utilization of the legal system in three specific areas one year posttreatment: Arrests for criminal offenses, arrests for traffic violations, and motor vehicle accidents.

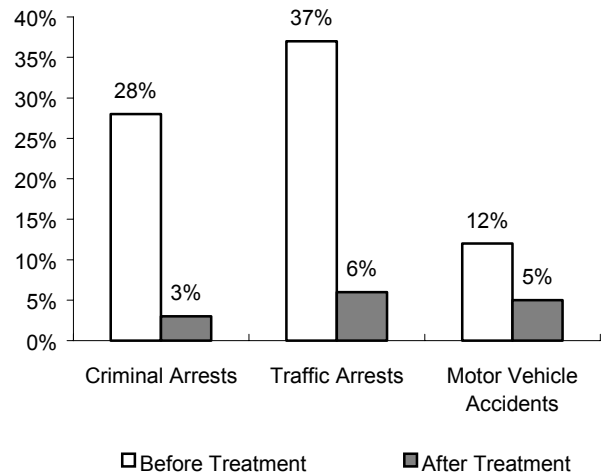
**Legal Cost-Offsets
 Residential/Step-Down Patients**



Outpatients

Legal problems also decreased for outpatients one year posttreatment, most notably in arrests for criminal

**Legal Cost-Offsets
 Outpatients**



offenses and traffic violations.

In sum, any decreases in legal involvement yield societal benefits through an easing of demands on already overburdened legal and insurance systems.

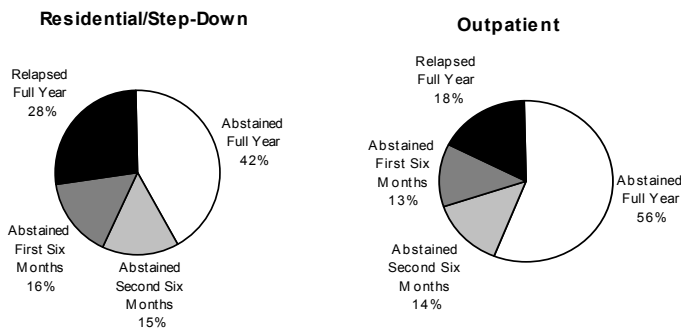
Legal fees, court costs and auto insurance premiums should be factored into the "cost" of the above legal problems, and they should be factored into the "benefits" of their reduction associated with chemical dependency treatment.

Abstinence Rates

The Alaska Division of Alcoholism and Drug Abuse treatment outcome study, designed to measure the effectiveness of publicly-funded residential and outpatient treatment began in February 1994. This study assessed 1024 residential/step-down patients and 510 outpatients who consented to assessments at admission, discharge, and six and twelve months after admission to treatment.

The overall one-year abstinence rate for residential/step-down patients was 42%, compared to 56% of the outpatients. A total of 57% of the residential/step-down patients and 70% of the outpatients reported full abstinence during the six months prior to the one-year follow-up. Twenty-eight percent of residential/step-down patients relapsed the entire year after treatment, whereas only 18% of the outpatients relapsed the entire year. These rates are comparable to those of similar rural, publicly funded populations.

One-Year Abstinence



Patient Characteristics and Abstinence

Male outpatients were more likely to abstain one year posttreatment than female outpatients (59% vs. 49%) while female residential/step-down patients were slightly more likely to abstain all year than their male counterparts (46% vs. 39%).

Among residential/step-down patients, those classified as low in severity were most likely to abstain all year (49%). Among outpatients those classified as moderately low in severity were most likely to abstain (61%). Fifty-seven percent of the outpatients dependent on alcohol remained abstinent one year after treatment compared to only 34% of the residential/step-down patients. Seventy-one percent of outpatients dependent on cocaine remained abstinent compared to only 29% in the residential/step-down programs. This finding may, in part, be due to the fact that those who are most severely dependent (and therefore less likely to remain abstinent) are placed in residential treatment.

Treatment Characteristics and Abstinence

Forty-nine percent of the inpatients with a length of stay between 22 and 28 days abstained all year, as did 44% of those with a length of stay of more than 29 days. Seventy-one percent of the outpatients with more than 40 hours of service remained abstinent for a full year as compared to 46% of those with 40 or less.

Continuing Care and Abstinence

CATOR aggregate analyses over the past decade have consistently documented a strong association between abstinence rates and post-treatment levels of program aftercare participation and peer support group attendance.

While, overall, attendance in continuing care programs among Alaska patients is generally lower than among CATOR facilities, the pattern still holds. Among the Residential/Step-Down patients, Formal Aftercare fully attended for a full year has the strongest impact on abstinence with 75% reporting a full year of sobriety.

Formal aftercare during the first 6 months appears to have the strongest impact on recovery among outpatients with 71-77% who reporting sobriety.

Continuum of Care and Abstinence Rates

	Residential/StepDown	Outpatient
Formal Aftercare Attendance (Months 1-6)	Fully Abstained	Fully Abstained
None	31%	49%
Some	43%	77%
Full	69%	71%
Formal Aftercare Attendance (Full Year)	Fully Abstained	Fully Abstained
None	27%	49%
Some	51%	68%
Full	75%	63%
Peer Support Group (AA) Attendance (Months 1-6)	Fully Abstained	Fully Abstained
None	19%	56%
Sporadic	39%	53%
Regular	51%	66%
Peer Support Group (AA) Attendance (Full Year)	Fully Abstained	Fully Abstained
None	30%	33%
Sporadic	21%	63%
Regular	62%	68%
Aftercare or Peer Support Group Attendance (Months 1-6)	Fully Abstained	Fully Abstained
None	20%	43%
Some	38%	47%
Full	51%	67%
Aftercare or Peer Support Group Attendance (Full Year)	Fully Abstained	Fully Abstained
None	29%	28%
Some	32%	61%
Full	64%	74%

