

Alaska Substance Abuse Prevention and Treatment System Effectiveness Study

Progress Report

Alaska Mental Health Trust Authority

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I. Background

The 2001 legislature appropriated \$100,000.00 to examine the effectiveness of Alaska substance abuse prevention and treatment systems. The Alaska Mental Health Trust Authority matched the appropriation with a similar amount. Using these funds, the Trust has initiated an overview of the effectiveness of Alaska's publicly-funded substance abuse treatment system. It is a very multi-faceted and complex task that starts with the notion of ways of measuring the effectiveness of the system. This report summarizes the work to date on this complex project.

A. Initial Charge from the Legislature

In its appropriation language,¹ the Legislature requested the Trust Authority to find out if substance abuse treatment in Alaska really works. This was interpreted by the Trust to mean that they were to:

- Synthesize the available information on the impact of substance abuse on Alaskan individuals, families, communities and institutions,
- Examine the results of the New Standards Study,
- Identify benchmarks for treatment success, and
- Assess the ability of Alaskan data to measure the outcomes of treatment and prevention programs and the resulting reduction of impacts to Alaskans.

The Trust Authority requested the University of Alaska, through the Institute for Circumpolar Health Studies at the University of Alaska Anchorage, to assist in this review. The first phase of this effort was to:

- Examine what kind of indicators of effectiveness there should be,
- Examine some of the problems with developing various indicators,
- Synthesize what has been learned over the past few months about how these indicators have been applied in Alaska, and
- Develop some suggestions for how to improve or institutionalize these measurements of treatment and prevention system effectiveness.

B. The Trend for Increased Accountability of Publicly Sponsored Programs

Accountability is an important focus of all levels of government. People are pressing government officials to demonstrate the impact of tax-supported services.² Implementing systems which collect and report ongoing information that measures the impact of publicly funded programs has proved difficult. In Alaska, there has been

¹ House CS for CS for Senate Bill 2006(Fin) am H, Section 81 (d)(3).

² In 1938, the International City/County Management Association (ICMA) issued a report entitled Measuring Municipal Activities which promoted monitoring of municipal services. The National Science Foundation collaborated with ICMA to test some of these methods. The Federal government has pushed for enhanced accountability through the 1993 Government Performance and Results Act.

increased interest in developing program performance measures. These measures would guide the Administration in more accurately focusing the programmatic activities on those outcomes and results that are desired by the Legislature.

There is a growing interest by the Legislature and the administration on the accurate measurement of the results produced through Legislative appropriations. In recent years, the Legislature has initiated a process to formalize performance measures and results for each Department within State government. These measures would be routinely reported to the Legislature. This could be expected to support a “results-based budgeting” system.

Various consultants have worked with the legislature and the administration on these areas. The legislative consultant is Craig Holt. The Alaska Mental Health Trust retained Mark Friedman and his successor Cornelius Hogan to perform a similar review of results-based budgeting supported by the Alaska Mental Health Trust Authority. Craig Holt, Mark Friedman, and Cornelius Hogan are delivering essentially the same message – that there is a shift from inputs to outputs.

The consultants stress the importance of the shift from an emphasis on programs to an emphasis on results, or a shift from inputs to outputs. In other words, rather than measuring the amount of money that is spent on a particular program, a program manager would carefully define what it should produce, and to what extent the resources are applied to this particular venture are generating the results expected. This is a major philosophical shift from the past when people talked about programs rather than focused on results.

According to Holt, this shift requires substantial agreement among elected officials, advisory bodies, and the administration on exactly what results are expected of the program. Despite the straightforward logic of this notion, this is not a simple task. Clearly defining programmatic outcomes is difficult. It demands agreement by stakeholders on the desired outcomes. Difficulties appear to arise when stakeholder groups who assumed that they had agreement on outcomes discover less agreement than initially thought.

There is an obvious end-point in this discussion: successful programs that produce the expected results will be sustained and those that are not able to produce results will not.

This shift is also seen at the federal level. The Government Performance and Responsibility Act (GPRA) requires that programs funded by the federal government report treatment outcomes and results in a way very similar to what is now going on at the state level.

C. Measuring Levels of Program Effectiveness

Programs can be thought to be effective at three levels; the community, family and individual levels.

The broadest level of effectiveness is the **community** level. Community-level effectiveness indicators show how programs are impacting the general health and welfare of a population and the institutions that provide the services used to resolve those threats. Much of the community level measurement is accomplished through national benchmarking.

Second is the **family** level of measurement. These measures indicate the extent of family stability, domestic violence, child custody, and other measures of family stability that appear to be related to substance abuse treatment. Despite policy emphases that focus on families, the family level of measuring program impacts was not operationalized in results measurement systems or performance indicators. Until recently, this was evident in measurement systems for the substance abuse prevention and treatment programs.

Last, and the most common, are **individual** measures of program impacts. These are typically focused on individual treatment outcomes. Such outcomes are often measured in terms of productivity, abstinence, or treatment completion. Many of the GPRA measures are focused on individual treatment indicators.

II. Alaska/National Comparisons on Risk, Impact, and Use of Services

There are many other sources of measurement as well. Many of these sources of measurement of effectiveness at a community level compare Alaska with other states on a variety of measures. These comparisons are often referred to as “benchmarks.”

A. National Benchmark Comparisons

These benchmarks are shown in Table 1. A complete presentation of benchmark data is shown in “Substance Abuse Effectiveness Project Working Paper #1.”

Table 1 shows how Alaska ranks with other states in substance abuse risk, health impacts, social impacts, and service use. The table leaves one clear and compelling message: Alaska is not faring very well in addressing its substance abuse problems. It ranks at or near the top of the list in the extent of risk, the health impacts, the social impacts of substance abuse, and service use. Although longitudinal data are not presented here, it is the sense of these researchers that Alaska’s high ranks, compared with those of other states, and has been consistent over many years.

Table 1. National Substance Abuse Benchmarks

Indicator	AK rank
Risk	
drinking-mothers newborn 3-4 drinks /week	1
need/capita index (population at risk of abuse)	2
drinking-chronic 60+/mo	2
drinking-binge 5+drinks last mo at 1 time	4
motor vehicle fatalities bac >.1	13
drove after drinking	21
Health Impacts	
mortality/100000	1
fetal alcohol syndrome live births	1
Social Impacts	
problem index (arrests, clients, mortality)	5
dui arrests	6
Service Use	
admissions to alcohol programs	2
clients in treatment (alc only)	11

B. Limitations in National Benchmarking

National data sets that allow a comparison among all 50 states have a certain allure. They allow us to clearly see where Alaska stands using standard and traditional ways of measuring systems effectiveness.

1. Advantages: The main advantage of national benchmarking is that the process relies on administrative data sets that allow comparison with other states. These measures incorporate risk, service use, social impact, and service effectiveness and are commonly used in the particular area of interest. In this study, the area of interest is substance abuse, while other national benchmark studies compare child safety, environmental quality, public health systems or general quality of life. They all present measures that are stable over time. These measures, because they're part of administrative data sets, do not change very much from year to year. This allows long-term measures of large phenomenon.

2. Disadvantages: The disadvantages of national benchmarking are also evident. Benchmark indicators are crude and aggregate measures. They are taken at the highest level of aggregation, and hence do not measure the effectiveness of specific programs, nor do they allow comparisons between specific subsets of any population. They do not take into account the unique characteristics of one state or another that tend to generate these rankings. So, although they're suggestive, they're certainly not the end of the measurement effort for any of us. They are only national benchmarks.

III. Community Level Effectiveness Indicators

Community measures of effectiveness are based on the notion that individuals with such problems generate a threat to the health and welfare of the general population and the institutions that serve them. Community level performance targets measure the health and welfare status and health risks of the populations.

The efforts of the Alaska State Legislature to establish expectations for program results are only one example of the trend for increased program accountability. The Department of Health and Social Services has established a series of health goals, targets and strategies for Alaska. Their efforts are part of a 20-year national initiative to set and update health goals for the Nation. The Alaska Mental Health Trust Authority has encouraged its beneficiary boards to examine possible program effectiveness indicators. The Governor's Advisory Board on Alcoholism and Drug Abuse has participated in a similar activity. At the national level, there are numerous agencies that routinely compile data from national administrative databases. This section presents proposed Alaskan effectiveness measures and Alaska's comparison to other states in regard to substance abuse.

A. Alaska Community Level Substance Abuse Indicators

Alaskans have tried to establish our targets for local and statewide benchmarks.³ The Alaskan goal for substance abuse stated in the Healthy Alaskans, 2010 Plan, is to "reduce substance abuse and protect the health and safety for the quality of life for all, especially children." This is shown in Healthy Alaskans, 2010, Chapter 4. Table 2 gives some selected measures of how Alaska should target its efforts in the years to come.

Table 2. Selected Alaskan Substance Abuse Indicators, *Healthy Alaskans 2010*

Measure	US Baseline	Alaska Baseline	Alaska Target
Alcohol-related Motor Vehicle Crashes/100,000	5.9	5.5	3
Cirrhosis deaths /100,000	9.6	10.3	6
Decreased proportion of high school students who consumed 5 or more drinks within a couple of hours at least once within the last 30 days*	32%	34%	30%
Increase average age of first use*	13.1	12.4	16.1

*Youth Risk Behavior Survey does not include Anchorage high school students

The list presented here is for selected targets only, but shows a clear variety of indicators including motor vehicles crashes, cirrhosis deaths per hundred thousand, and focuses on substance use among school children.

³ *Healthy Alaskans 2010: Targets and Strategies for Improved Health*, Alaska Department of Health and Social Services, April 2002, Section 4-2

B. Indicators Proposed by the Governor's Advisory Board⁴

The Advisory Board published "Results Within Our Reach, The 1999-2003 Plan for Substance Abuse Prevention and Treatment Services." The plan focuses largely on community levels of measurement. They include measuring reductions in:

- Binge drinking by adults
- Driving Under the Influence (DUI) convictions
- Per capita alcohol consumption
- Alcohol-related injuries requiring hospitalization
- 12 hour protective custody holds
- Drug-related convictions

⁴ In Step Plan, DHSS and MHTA, November 2001.
Results Within Our Reach, Governor's Advisory Board on Alcoholism and Drug Abuse, January 1999.

IV. Individual Measures of Systems Effectiveness

For many years, the successful treatment outcomes were considered to be the most important measure of successful alcohol and substance abuse treatment outcomes. These measures were typically grounded in the prohibitionist and abstinence ethic⁵. Many outcomes were considered binary outcomes in which people were either abstaining or they were not abstaining. Indicators of success showed these two extremes and little, if any, measurements in between. Clearly the field of alcohol and substance abuse outcome research has progressed substantially beyond this historic point. No longer is the measure merely abstinence or not. There are behavioral changes that have come into the measurement business in recent years.

This section presents and critiques measurement of individual treatment effectiveness, and presents examples of Alaska's efforts to measure these effects.

A. The New Standards Study

The Division of Alcoholism and Drug Abuse sponsored a major study of individual treatment effectiveness. The study was called the New Standards Study.⁶ The study tracked individuals treated during the years 1994 and 1995 to assess their treatment outcomes. The subjects of the study were 1,534 clients from 13 publicly funded Alaskan substance abuse treatment facilities. The major measurement was abstinence at six and twelve months after treatment, and of treatment completion. Study also gathered some other measures of behavior change.

1. Definitions of Treatment Settings: Treatment for alcoholism involves a wide array of settings that utilize many different program formats. The New Standards Study, while employing the facility definitions noted below, did not account for different services or treatment modalities provided within each facility. Treatment settings can generally be classified into three major categories: (1) inpatient or residential, consisting of intermediate- and long-term programs; (2) transitional care; and (3) outpatient programs.

a. Inpatient/Residential Treatment: Residential treatment involves care for periods of up to 30 days, but some programs may retain clients for longer or shorter periods of time. A residential or inpatient program generally provides medical and supportive services for patients requiring 24-hour supervision in a hospital or other suitably equipped and licensed facility for the treatment of alcohol problems. Patients may be admitted directly into such programs following detoxification, or may be referred by physicians, the courts, or health and social agencies, or they may be self-referred. These programs are sometimes called intermediate care programs, in that patients have traditionally been admitted subsequent to detoxification and, upon completion of the program, may be referred to a long-term program, a residential center, or outpatient

⁵ A more complete treatment of this idea is shown in Substance Abuse Effectiveness Project Working Paper #2.

⁶ New Standards Study, Alaska Division of Alcoholism and Drug Abuse, 1994

treatment. Inpatient programs may be part of a unit in a public or private general hospital, a private specialized hospital, or a specialized residential program.

Residential treatment involves participation in a highly structured program in a supportive environment designed to help patients deal with their drinking behavior. Such treatment is utilized for persons who require intensive intervention and who need to be separated from their day-to-day environment to overcome their abusive drinking. It also allows supervised medical treatment to be undertaken, if warranted. Inpatient programs provide individual, group, and family counseling, as well as other therapeutic activities to assist in rehabilitation.

Extended- or long-term- care programs provide inpatient or residential treatment for periods that extend beyond 30 days. Such programs, to which patients are referred after discharge from intermediate care, are designed to provide supportive treatment for up to an additional 60-, 90- or 120-day period for patients who need more time to recuperate. The extended treatment program, in addition to continuing to provide counseling, usually focuses on helping patients develop life skills that will help to prepare them to assume a responsible role when they return to the community. New job skills, or updates on old ones, are taught, and vocational rehabilitation training helps the clients to prepare themselves for competing in the job market. The extended care also provides patients with sufficient time to restructure family lives or, in cases where they are without a support system, to begin to work on developing a nonalcoholic support group.

b. Transitional Care: In many instances patients, after discharge from an intermediate care program, or even after a long-term-care program, are not ready to return to the community. A gradual reentry process is needed, and transitional care helps individuals to reestablish themselves slowly in the community. Many persons who require such programs have no roots in the community and are in need of continued support to make it on their own after discharge from a long-term residential program.

One form of intermediate care is day care (partial hospitalization), in which the client spends the day in a structured program, and returns home, or to a halfway house, during evenings and weekends. A variation of the day hospital is a weekend program, in which clients return over the weekend to engage in supportive activities. Another type of intermediate care is a night program, in which participants return to the program after work, or after being at home during the day, to sleep; clients are engaged in counseling activities in the evening.

The major method of providing transitional care, however, is by means of halfway houses, which serve as temporary group live-in facilities for those who have been discharged from residential programs. Halfway houses offer a supportive environment to assist clients to maintain sobriety and to work toward establishing independent living. A variety of rehabilitative services are available, ranging from individual and group counseling to vocational and educational training.

c. Outpatient Treatment: Outpatient treatment, provided by either private or publicly funded programs, has become the type of treatment most often employed for individuals experiencing alcohol-related problems. Outpatient services may be delivered by units in a general hospital, veteran's hospitals, psychiatric clinics, specialized alcohol treatment facilities, or community mental health centers, or by self-help groups. Of the last, Alcoholics Anonymous (AA) handles the largest share of individuals seeking help for drinking problems outside of a professional setting. The major benefit of outpatient treatment is that it allows people to maintain their daily life while receiving help.

There are two basic types of outpatient settings:

- Intensive Outpatient Care, which provide service ranging from 8 hours a day, seven days a week, to three hours daily, several days per week. The advantage of intensive outpatient treatment is that it provides a secure setting in which clients can be provided comprehensive services, and can serve a larger number of clients compared to an inpatient program, thereby resulting in greater cost effectiveness, a concern, as noted above, expressed by health insurers.
- Regular Outpatient Care, in which services are provided after discharge from a residential or intensive outpatient program, usually involving clients in weekly group sessions and in individual counseling once or twice weekly. Participation in AA meetings is often involved, and family therapy may be offered when appropriate.

The length of stay in either form of outpatient care is related to the accomplishment of treatment objectives established by the counselor in consultation with the client.

2. Study Findings: The New Standards Study reached the general conclusion that Treatment produces positive changes. Specifically,

- Higher doses of substance abuse treatment produce better results.
 - Residential treatment produces better results than outpatient treatment.
 - Treatment experiences of longer duration produce better results than shorter treatment experiences.
 - Good aftercare produces better long-term abstinence.
- Treatment reduces:
 - Motor vehicle crashes
 - Criminal arrests
 - Traffic arrests
 - Emergency room use
 - Hospital use

Table 3 summarizes the results of the New Standards Study. In essence, the study clearly demonstrated that treatment produces positive changes. Abstinence is enhanced when the duration of treatment is increased and when aftercare programs follow discharge.

Table 3. Individual Abstinence Measures of Treatment Effectiveness, New Standards Study, 1994.

Measure	Percent Abstained	
	6 Month	12 Month
Outpatient		42
0-49 treatment hours	62	
50+ treatment hours	85	
70+ treatment hours		79
no continuing care	52	
some continuing care	69	
full continuing care	73	74
Residential		56
0-21 days	47	
22-28 days	57	
29+ days	58	44
no continuing care	36	
some continuing care	45	
full continuing care	69	64

B. Critique of New Standards Study

The Trust Authority requested a critique of the New Standards Study. First, it was apparent that the New Standards Study used what were considered appropriate measures at that time. It also highlights the state of development of treatment system measurement that is the state of the art in the field right now. Nonetheless, for its time, appropriate indicators appear to have been used.

Second, there was a concern that the study may have overstated results by not being able to track down and follow up individuals who may have had less desirable treatment outcomes than those who agreed to be interviewed during the follow-up research. The recently emerging national literature does not fully support this concern. A recently released federal study⁷ found very few differences between respondents and non-respondents. There were some differences that may not substantially affect the results of a non-respondent self-selection bias in the New Standards Study. Specifically, the SROS study found that respondents were more likely to be female, that Hispanics were under-represented, there was less information on after-care than desired, and there were fewer physician notes among non-respondents. However, these measures may not have shown a material effect in the New Standards outcomes.

⁷ The Services Research Outcomes Study (SROS, SAMHSA, 2002), is the first nationally representative study of substance abuse outcomes, confirms that both drug abuse and criminal behavior are reduced following drug abuse treatment - inpatient, outpatient, and residential. (N=2770)

Another concern was the potential for sampling bias. There are two parts to this threat to the validity of the study. First, only 13 publicly funded substance abuse treatment facilities were included in the study. Second, only those responding were included in the study. While there is no way to confirm or refute this threat to the validity of the New Standards Study, it raises some concerns; the fewer patients contacted, the less generalizable the results, particularly when contacts are skewed in favor of higher functioning, easier-to-reach patients⁸

C. Agreement between the New Standards Study and other Studies.

Another way to examine the validity of the New Standards Study is to compare the study's results with those of other studies. A number of studies have shown results consistent with New Standards. Other studies have not shown any significant differences in treatment outcomes among the various types of treatment settings.

1. Studies Inconsistent with New Standards Study: Comparisons of the effectiveness of inpatient versus outpatient treatment programs revealed that "no strong evidence exists to support the view that either inpatient or outpatient treatment per se is preferable" (Solomon, 1983, p. 17). Additionally, research has found no significant differences in outcome among inpatient, outpatient, partial hospitalization, and day clinic settings (NIAAA, 1990). While there may be qualitative differences between patients admitted to outpatient and inpatient programs, it has been extremely difficult, from a methodological point of view, to account for such differences in research designs that compare the efficacy of the two. Inpatients, it should be noted, tend to present more severe initial problems and to have less stable lifestyles, while those in outpatient treatment tend to be less severely dependent and are able to maintain an ongoing lifestyle. If an effective evaluation is to be achieved that distinguishes among different types of treatment modalities, then research needs to be designed that will account for the characteristics of patients who enter the different programs.

2. Studies Confirming New Standards Study: The New Standards Study was confirmed by findings from the Service Outcome Research study. Table 4 shows the proportion of the sample (n=2770) on a variety of indicators. Researchers surveyed respondent recall for five years before treatment and five years after treatment for a total of a ten-year time span. This table shows that alcohol use decreased over this period, illicit drug use decreased, driving while intoxicated decreased, breaking and entering decreased, and the number of arrests went down. Full-time employment did not appear to show a material change. However, the effects may be attributable to the large 10-year timeframe and not to the treatment program itself.

⁸ Gerson et al., 1985; Harrison and Hoffmann, 1989; Stinchfield et al., 1994a).

Table 4. Results of Service Outcome Research, 2002

Indicator	Percent 5 Years Pre-Treatment	Percent 5 Years Post-Treatment
Alcohol Use	91	78
Any Illicit Drug Use	75	59
Driving While Intoxicated	61	43
Breaking and Entering	14	8
Arrests	66	54
Full Time Employment	75	74

Other published research also confirms the overall findings of the New Standards Study. While there has not been a detailed critique of the findings shown in each research report, they have all been included in the SAMHSA Technical Assistance Report Series⁹. A summary of studies confirming the overall findings of the New Standards Study is shown in Table 5.

Table 5. Published Studies Confirming New Standards Study Findings¹⁰

Indicator	Supporting Research
Reduced alcohol use	Luckey, 1987 Sros, 2002 .
Reduced criminal activity	Alander and Campbell, 1975 Alfano et al., 1987 Harrison and Hoffmann, 1989; Hoffmann et al., 1984; Hubbard et al., 1989 . California Department of Alcohol and Drug Programs, 1994 , Sros, 2002
Reduced use of health services	Holder, 1987; Holder and Blose, 1992, 1986; Holder and Hallan, 1986, 1981; Holder and Shachtman, 1987; Jones and Vischi, 1979 Sros, 2002
Increased Full Time Employment	Hubbard et al., 1989; McLellan et al., 1992a; Pickens and Fletcher, 1991; Tims et al., 1991 Sros, 2002

⁹ Developing State Outcomes Monitoring Systems for ATOC Treatment (1995) SAMSHA Technical Assistance Publication Series #14, Washington DC

¹⁰ Complete citations are shown in an Appendix.

D. Measuring Effectiveness of Facilities vs. Effectiveness of Services.

Like many other studies, the New Standards Study examines the outcomes of clients who have completed some form of treatment in an approved substance abuse treatment setting. The New Standards Study then compared the treatment settings with one another. This analysis appears to be largely independent of the specific services that occur within each setting. Conflicting research reports may be based on the differences in the type of treatment modalities provided within various facilities.

Although different approaches for treating alcoholism have developed over the years, and interest in alternatives to the abstinence model has evolved, the clinical treatment of alcoholism has largely proceeded on the assumption that alcoholism is a disease and, as a result of the widespread acceptance of the disease model, "the ways in which treatment services are developed and implemented are related to assumptions made about their intended clientele."¹¹ Thus, "many 'alcoholism' programs have only offered one treatment approach - their approach."¹² Such approaches have primarily focused on separating the drinkers from the alcohol, educating them about the disease, and conveying the message that recovery can only be attained when total abstinence is achieved. Within this context, it is only appropriate that Alcoholics Anonymous, which advocates and provides support for the practice of abstinence from alcohol, has been the major approach or philosophy employed in the treatment of alcoholism.

A review of clinical literature highlights the differences in clinical outcomes between various treatment and prevention modalities.¹³

1. Synthesis of Clinical Outcome Literature: A meta analysis of the extensive clinical evaluation data was conducted in order to make some statistical sense of the research findings. A more complete treatment of this idea is shown in "Substance Abuse Treatment Effectiveness Project Working Paper #4."

Studies included in Table 6 represent an overview of recent meta-analysis articles and a ranking of their respective results. Table 6 shows that several different studies have ranked similar treatment programs in a consistent manner. For example, the treatment referred to as the community reinforcement approach (CRA) ranks highly on all three studies. This is of particular importance in Alaska where culturally relevant therapies seem to offer the best hope of success.

¹¹ (Rossi & Filstead, 1976, p. 193).

¹² Pattison et al. (1977), p 212

¹³ A more complete treatment of this idea is shown in Substance Abuse Effectiveness Project Working Paper #3.

Table 6. Top-Ranked Treatments in Three Recent Meta-Analyses

Study Rank	Holder, Longabaugh, Miller, and Rubonis (1991)	Miller et al. (1995)	Finney and Mohan (1996)
1	Social skills training	Brief intervention	CRA
2	Self-control training	Social skills training	Social skills training
3	Brief motivational counseling	Motivational enhancement	Behavioral marital therapy
4	Behavioral marital therapy	CRA	Disulfiram implants
5	CRA	Behavior contracting	Marital therapy, other
6	Stress management training	Aversion therapy	Stress management training

NOTE: CRA = community reinforcement approach
(Adapted from Meyers et al. 2002)

The common thread in highly ranked treatment programs, listed in Table 6 appears to involve the relationship between the client and another entity such as a spouse or a larger community. In our search for suitable treatment programs, full consideration was given to programs that fit into this broad category of treatment programs.

Meyers refers to three specific treatments that, in his opinion, are underutilized by clinicians (Meyers et al. 2002). The three treatments, behavioral marital therapy (BMT), community reinforcement and family training (CRAFT), a superset of the community reinforcement approach (CRA), and family therapy, seem to yield results that, while not reported in a statistical manner, merit closer examination.

E. Findings from Evaluation Reports of Alaskan Programs.

Over the past three or four years, there have been attempts to carefully evaluate treatment programs supported by the Center for Substance Abuse Prevention and the Center for Substance Abuse Treatment throughout Alaska. These evaluations allow us to reach a certain limited number of conclusions.

1. Culture-based services for Alaska Native people produce superior outcomes. Programs like the Chemical Misuse Treatment and Recovery Services (CMTRS) in the Bethel area provided culture-based services at the village level and showed better treatment outcomes and more accessibility to services for women, and showed greater stability and less variability in alcohol-related arrests and convictions in those participating communities compared with other communities that did not have village-based services.

The Hudson Lake project, sponsored by the Copper River Native Association, has shown similar results and remarkably high rates of treatment completion and long-term positive outcomes.

2. Our current system must better recognize the broad range of behavioral problems that individuals have who come in for treatment. Underlying much of the substance abuse is domestic violence, historical trauma and associated post traumatic stress disorder and sexual assault. These issues need to be addressed along with substance abuse or no material clinical gains will be made.
3. Alaskan treatment providers are not applying recent clinical advancements to their practices. There is little known through administrative data sets about how programs deliver services within their facilities. Evaluation site visits, however, suggest that many treatment providers are not using best practices in their clinical routines. Treatment effectiveness may improve through the introduction of these practices.

F. Summary of National and Alaska Treatment Effectiveness Research.

There appear to be two significant methodological problems in measuring the effectiveness of individual treatment outcomes:

1. There is a shift in the definition of an appropriate metric for success. Historically, our culture has maintained a conservative and wary approach to substance abuse. The result of this philosophy is the binary approach to treatment outcome measurement. This has limited measurements of improvement in the health status or consumption behavior of those Alaskans who have gone through treatment. More recent research examines a spectrum of clinical improvements and substance abusing behaviors. These changes from measuring abstinence to measuring change in behaviors makes a direct comparison of effectiveness measurements and indicators difficult.
2. Alaskan studies measure treatment effectiveness through facilities, not the services they provide. The New Standards Study compared treatment outcomes for clients discharged from 13 facilities. It did not compare the effectiveness of the services received by the client subjects. Research at the facility level suggests that there is little difference between types of facilities. To the extent that differences are found, they may be more attributable to the type of services provided than the facilities in which they are provided.

V. Family Measures of Systems Effectiveness

While Alaskans emphasize the importance of the family, few of the traditional measures of substance abuse system effectiveness have addressed this concern. Impacts on families are difficult to measure. They take the form of domestic violence, child abuse and neglect, and child custody among other measures. While data on all these are maintained by some program or funding agency (and some are even included in benchmark studies¹⁴), they are not tied to successes in the treatment of individual Alaskans.

However, the Alaska Division of Alcoholism and Drug Abuse recently produced its own more detailed monitoring system over the last few years. With the assistance of C&S Management Services, the Division created an outcome reporting system that has captured data on almost 4,000 clients. These data have shown a remarkable breadth and positive client outcomes.

Figure 1 highlights the three basic categories of outcome measures. They include treatment process, outcomes, and life functioning. This is the first time that state sponsored treatment programs have measured the impact of treatment services on the welfare of Alaskan families involved with the client.

The ADA outcome reporting system is the first time that these researchers have seen a concerted effort at measuring the impact of treatment services on Alaskan families. Figure 1 shows the inventory of measures of treatment success collected by the new system. Those that address the “life functioning” domain are most closely related to family level measures of system effectiveness. With almost 4,000 observations now available for analysis, it could be time to examine these measures in detail and refine them as necessary so that they can be included as measures of family impacts.

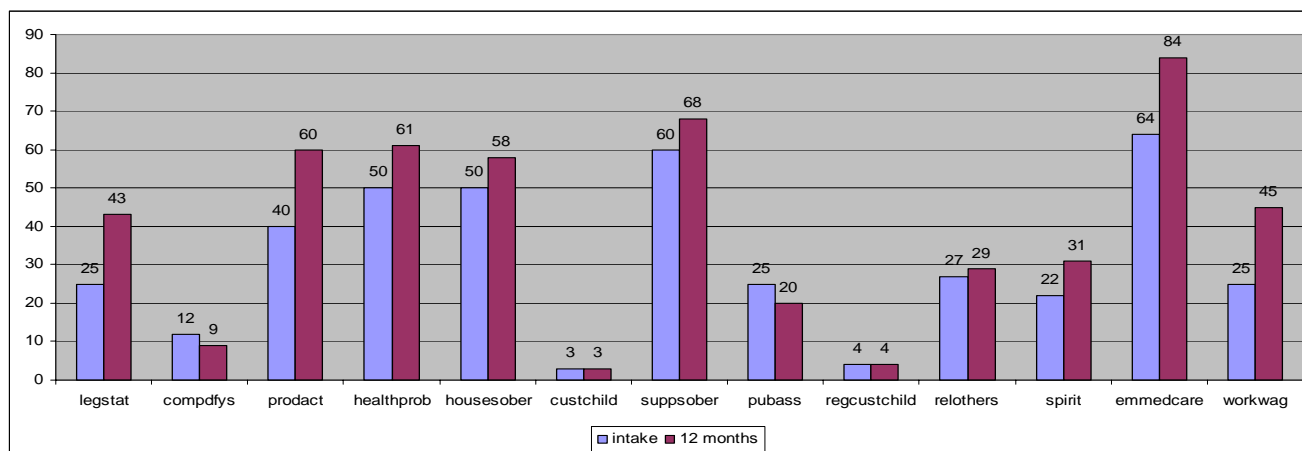
An analysis of aggregate data shows marked client improvements at six and twelve month follow-up after treatment. Figure 2 highlights those improvements. The data system measures changes in legal status, compliance with DFYS custody plans, engagement in productive activity, the extent of health problems, securing of sober housing, child custody agreements, a personal system which supports sobriety, the use of public assistance, positive relationships with others, spirituality, the use of emergency medical services, and extent of hours worked in gainful employment.

¹⁴ An example is [Kids Count](#), a compilation of comparative data on child welfare sponsored by the Annie E Casey Foundation and produced in Alaska by the Institute for Social and Economic Research at UAA.

Figure 1. Inventory of Data Elements in ADA Outcome Reporting System

<p><u>Treatment Process</u></p> <ul style="list-style-type: none"> •Client Care Following Residential Treatment •Entered Formal Aftercare •Entered Outpatient Care •Self-Help Group Only •Client Care Following Outpatient Services •Entered Formal Aftercare •Self-Help Group Only •Successful Treatment Completion 	<p><u>Life Functioning</u></p> <ul style="list-style-type: none"> •Change in Legal Status-Last 6 Months •Compliance with DFYS Child Custody Plans •Engagement in Productive Activity (hrs/wk) •Extent of Current Health Problems •Housing Contribution to Sobriety •Lost Custody of Children-Last 6 Months •People Supportive of Sobriety •Public Assistance •Regaining Custody of Children-Last 6 Months •Relationships with Others •Spirituality •Use of Emergency Medical Care-Last 6 Months •Working for Wages (hrs/wk)
<p><u>Outcome Measures</u></p> <ul style="list-style-type: none"> •Alcohol Consumption vs. Expectations •Drinking during the Last Month •Illegal Drug Use Last Month 	

Figure 2. Preliminary Data from ADA Outcome Reporting System



Major areas of improvement in the welfare of Alaskan families that appears to be the direct result of substance abuse treatment services is shown in Table 8.

Table 7. Examples ADA Outcome Measures:

Measure	At intake	12 mo.
Reduced legal problems	25%	43%
Working for wages	25%	45%
Engaged in productive activity	40%	60%
On public assistance	25%	20%

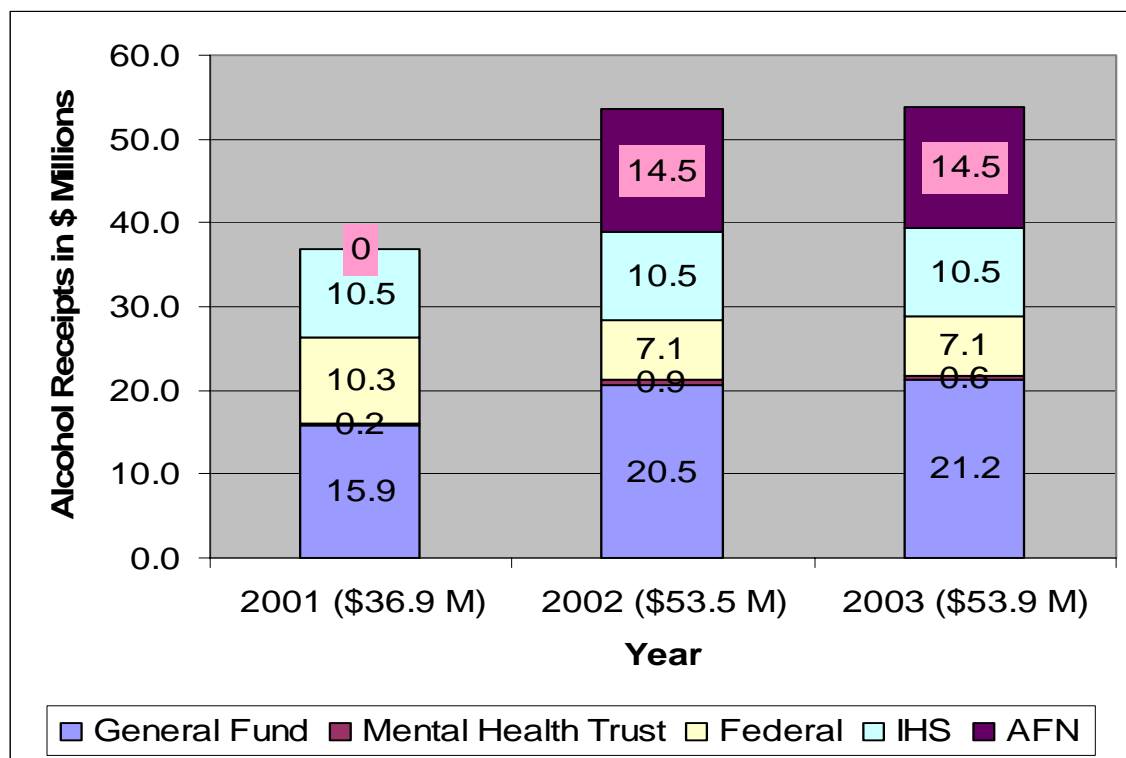
VI. Funding for Alaskan Substance Abuse Programs

Substance abuse-related expenditures were compiled for the years 1991 through 2003, where possible.¹⁵ Infusions of grant funds into the substance abuse prevention and treatment system in recent years, have generated a detailed, complete account of funds received only for 2001 through 2003.

A. Estimates of Substance Abuse Treatment and Prevention Funds

In 2001, there was approximately \$37 million available for substance abuse treatment in the state of Alaska. \$20.8 million came from IHS and other federal sources. \$15.9 million came from state general funds. In the last two years, an additional \$14.5 million has been granted to Alaska Native regional corporations through the Alaska Federation of Natives to support substance abuse prevention and treatment efforts. The preliminary source of funds estimates is shown in Figure 3.

Figure 3. Preliminary Estimates of Public Substance Prevention and Treatment Funds in Alaska, 2001-2003



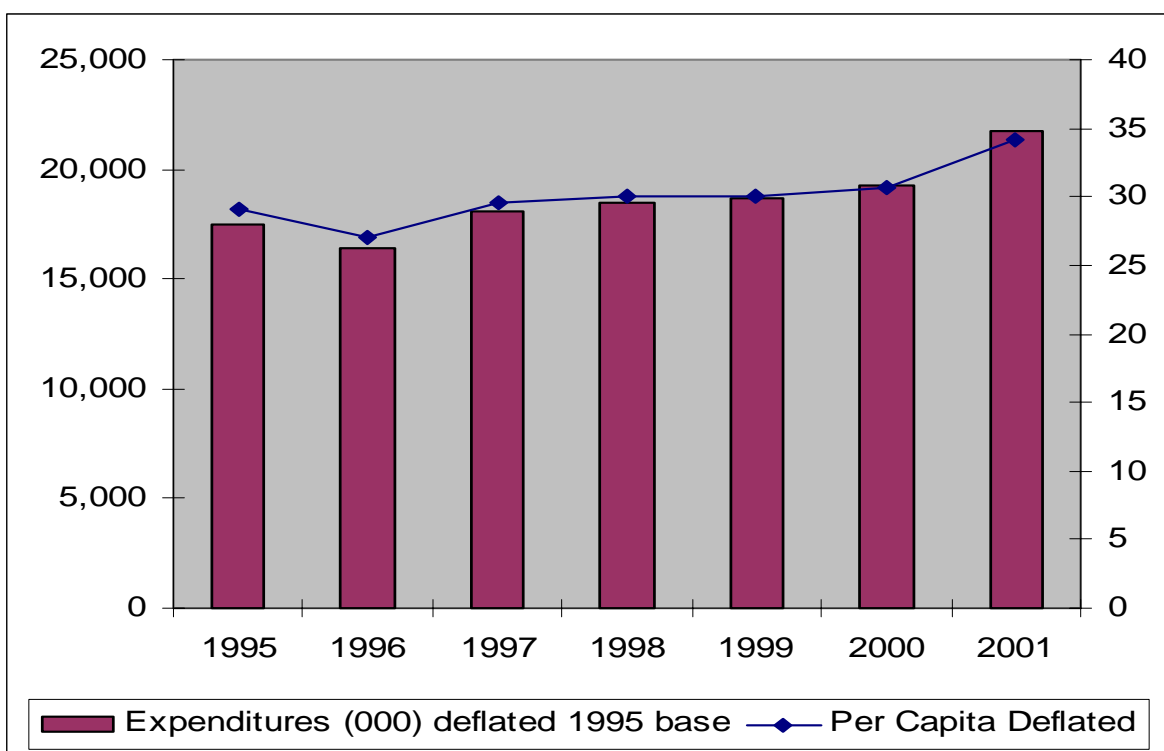
¹⁵ A more complete treatment of this idea is shown in Substance Abuse Effectiveness Project Working Paper #5.

B. Funds Allocated by the Division of Alcoholism and Drug Abuse.

The State of Alaska receives funds from the State Legislature, the Alaska Mental Health Trust Authority, and the federal government. The Division of Alcoholism and Drug Abuse retains administrative accountability for the expenditure of all these state and federal funds.

Figure 4 shows the per capita state expenditures for substance abuse from 1995 to 2001. This figure shows that after expenditure figures are adjusted for inflation that per capita expenditures are actually declining.

Figure 4. State Substance Abuse Prevention System Support, 1995-2001



C. Adequacy of Public Substance Abuse System Support

Declining public expenditures for substance abuse prevention and treatment would probably have little success in reducing Alaska's preeminent status as the most severely impaired state in the Union when it comes to measuring the social impact of substance abuse using community-based measures and benchmarks. The question then becomes: Are these resources that are going into treatment enough to make a substantial dent in Alaska's status?

The answer to the question is evident at first, that we continue to rank very high in all these national benchmarks, but we wanted to get a little more detailed in looking at specific areas that could conceivably demand more attention than others. For this, we used standard epidemiological methods based on work performed by the Alaska Division of Public Health using a national methodology centrally sponsored by the Gallup polling organization.

The epidemiological data was supplemented by consultants hired by the Division of Alcoholism and Drug Abuse (North Charles study)¹⁶ to estimate the number of Alaskans in need of service and those who actually reported receiving the services that they needed. Respondents were identified using random sampling, telephone interviews, and screening instruments. Of the 39,000 respondents found to be in need of alcohol service, only 6,000 or 15.5% received those services.

This calculation is called a target population penetration rate and is shown in Table 7.

Table 7. Target Population Penetration Rates for Selected Groups of Alaskans

Group	Alaskans in Need	Receiving Service	Proportion Served
Adult Households with Phones	29,739	4,372	14.7
Adult Households without Phones	4,456	655	14.7
Adolescents 12-17 in Households with Phones	3,561	356	10.0
Recent Prisoners	482	255	52.9
Homeless	464	357	76.9
Adolescents in Correctional Facilities	142	44	31.0
Total	38,844	6,039	15.5

There were specific groups that had different target population penetration rates. Table 7 shows that 14.7% of adults, both in households with phones and those without phones, were able to receive the services that they needed. Ten percent (10%) of the adolescents in households with phones received services. Over half of recent prisoners received services, and over three-quarters of the homeless. One-third of the adolescents in correctional facilities received the services that they needed.

In summary, it appears as if alcohol service needs for adults are high, but service demands are low. Service needs for adolescents not in jail are high and they demand service. Adolescents in facilities are high, but some of them do not want treatment very much. Recent prisoners are very interested in receiving services, although the extent of need may be a little less. Homeless people are very well served right now and do not appear to need a substantial increment in services.

¹⁶ North Charles Study (2002) Cambridge, MA

VII. Promising Measurement Activities

One of the major obstacles that has repeatedly prevented on-going measurement of the effectiveness of alcohol and substance abuse prevention and treatment services is cumbersome confidentiality regulations. These regulations prevent sharing of data at the individual level. In addition, a 1982 court settlement prevented the Division from obtaining client-level data that could facilitate the measurement of treatment system effectiveness.

However, there is a new data system on the horizon now that could solve many of these problems if these legal impediments could be relaxed. The Substance Abuse and Mental Health Services Administration has been developing a prototype data system for a number of years. The indicators are based on national research and are largely consistent with GPRA data collection protocols. Preliminary tests have already been completed in Texas and Maryland.

The data set integrates substance abuse and mental health data to the extent practical, and therefore is particularly appropriate for use in Alaska, especially in rural programs that serve both the mental health and addiction needs of rural Alaskan residents.

Current plans show that the alcohol and drug abuse programs will be on line with this new system by late summer and that mental health systems will be on line by the turn of the year.

It is expected that the data system can be modified to a certain extent to include family level measurements that have been developed by CNS and the Division of Alcoholism and Drug Abuse and have received extensive collection and testing over the last two years.

VIII. Recommendations

This is a preliminary examination of community, family and individual treatment impacts in Alaska. These are conclusions from this initial study.

1. The systems for measuring impacts have historically been and continue to be limited. Measurement of systems effectiveness, when conducted, relied heavily on an outmoded definition of individual treatment outcomes that stressed binary outcomes related to abstinence. The field of substance abuse evaluation has moved forward dramatically in recent years. No longer do researchers accept this limiting binary outcome, recommending instead the measurement of levels of client improvement.
2. The development of indicators is a complex process and must involve all stakeholders. The Trust is to be commended in sponsoring such an effort. One of the outcomes of initial discussions with certain stakeholder groups is the lack of consensus on what appropriate performance indicators should be and how to measure them. Until there is agreement on what the system is expected to accomplish, the development of measurement tools is at a standstill.
3. Alaska's prevention and treatment system must secure more resources or increase efficiency if it is expected to reduce the impact of substance abuse of Alaskans. An examination of the financial resources devoted to Alaska's most severe problem shows that resources applied to treatment and prevention programs have remained largely unchanged over the years. These flat allocations may be a primary contributor to Alaska's continued high ranking in federal benchmarks regarding the severity of substance abuse. An alternative to increased resources is to find new ways of providing more effective substance abuse treatment services.
4. Program funders should encourage use of promising or best practices, including:
 - Integration of mental health and substance abuse treatment techniques related to specific client needs
 - Greater recognition of treatment needs for patients who suffer from physical and sexual abuse or other long-term traumas.
 - Intensive wrap-around and other case management services.

These and other best and promising practices can help improve the effectiveness of services provided to individual clients, thus generating major gains to Alaska's people.

5. The organization of Alaska's treatment system can be improved. Tracking the use of state and federal funds for substance abuse treatment highlighted the fragmented nature of our prevention and treatment system. It appears to be a succession of funding decisions related more to the quality of a grant application than to the logical development of a rational system of care.

6. The Alaska Mental Health Trust Authority or other appropriate body should design a set of resource allocation measures that cover the spectrum of:

- Client groups
- Grantees
- Program types
- Geographic regions

This could help the current State-funded substance abuse treatment system to mature into a more rational system.

7. The State of Alaska should increase its ability to evaluate the effectiveness of the prevention and treatment system. The Division should be commended for its efforts to learn more about how the system it funds actually performs. This is not an easy task. Studies conducted and projects implemented by the Division have paved the way for more sophisticated, targeted and useful evaluation systems which can help policy makers and program managers continually improve the services they provide.

Appendix A References to Table 5

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