Evaluation of the IHS-Supported Alcohol and Substance Abuse Treatment Program for American Indian and Alaska Native Women

FINAL REPORT

Submitted by:

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I. Introduction

This study is part of a multi-phase effort initiated by the Indian Health Service (IHS) to better understand the needs, characteristics, and outcomes of the American Indian and Alaska Native (AI/AN) women who use the services of IHS-supported alcohol and substance abuse treatment centers. It is the first prospective study of the outcomes experienced by a representative sample of AI/AN women receiving such treatment for alcohol/substance abuse.

This study was conducted by Support Services International (SSI), an Indian-owned and managed research firm, working with Abt Associates as a subcontractor. In addition, a Technical Advisory Committee (TAC) provided guidance and feedback on critical aspects of the study. The study was conducted over a 5-year period, October 1995 through December 2000.

A. Goals and Objectives of Study

The purpose of this study was to assess the effectiveness of alcohol and substance abuse treatment services provided to AI/AN women by IHS-supported treatment programs. Effective treatment services are designed to improve the health of AI/AN women and, in turn, promote the health and survival of AI/AN families and tribal communities. The information provided by the study should be of value to tribes, Congress, Tribal Health Directors, Urban Indian Health Program Directors, policymakers, Federal agencies, researchers, and to others with an interest in alcohol/substance abuse (A/SA) treatment, Indian health in general, and the health of AI/AN women in particular.

The objectives of the study include:

- Describe the women who use the IHS-supported A/SA treatment services, their life conditions, and service needs,
- Assess and measure the outcomes experienced by the women receiving treatment in IHS-supported A/SA treatment programs,
- Relate outcomes experienced by the women to the treatment services provided, and
- Describe the IHS-supported treatment services provided to AI/AN women, identifying common strengths, problems, and recommendations for improvement.

The IHS identified a list of areas to be addressed by the study. This list is presented in Attachment 1.

B. Background

The overall health status of AI/AN women is worse than that of women in the general population, and there is a similar disparity for illnesses related to A/SA. The death rate of AI/AN women is 6 times higher for alcoholism, 5 times higher for cirrhosis/liver disease, and 3 times higher than the general population for homicide, accidental death, and motor vehicle accidents.[1]

The abuse of alcohol and other drugs constitutes a major threat to the health and well-being of Americans; these threats are even more severe in "Indian Country."[2] The economic burden of A/SA on the AI/AN population has been estimated to exceed $887,436,696 for the year 1985.[3] Other manifestations of the costs of A/SA include:

- ❒ Alcohol and substance abuse and their sequelae are the greatest threat to the overall health and well-being of AI/ANs.
- ❒ Alcohol abuse is responsible for 25 percent of all deaths for AI/AN women.
- ❒ Hospital discharge rates for alcohol-related diagnoses are approximately 3 times greater for AI/AN women than for women of all races in the United States.
- ❒ Alcohol and substance abuse are known to be significant contributing factors to 4 of the 10 leading causes of death and disability for AI/ANs.
- ❒ Substance abuse by women of child-bearing age presents a special problem because sequelae of the abuse may include fetal alcohol syndrome (FAS) and fetal alcohol effect (FAE).[4]

Congress has addressed the problem of alcohol and substance abuse in Indian Country. Public Law (PL) 99-570, the *"Indian Alcohol and Substance Abuse Prevention and Treatment Act of 1986"* requires the IHS to 1) determine the scope of the problem of alcohol and substance abuse among

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[1] *Trends in Indian Health*, Indian Health Service, Rockville, MD. 1997.

[2] In this report, "Indian country" refers to any State where an Indian Reservation, Rancheria, Pueblo, or Alaska Native village is located and the States where large numbers of American Indians reside such as Oklahoma and California.

[3] *Scope of the Problem of Alcohol and Substance Abuse Among American Indian and Alaska Native Communities*, American Indian Health Care Association, May 1992. Although the report was prepared in 1992, the year 1985 was the most recent year for which all data components were available to calculate this figure.

[4] Id; *Trends in Indian Health*, 1997.

Indian people, 2) assess existing and needed resources for the prevention of alcohol and substance abuse and the treatment of Indians affected by alcohol and substance abuse, and 3) estimate the funding necessary to adequately support programs of prevention of alcohol and substance abuse. The Act prescribes coordinated efforts to fight alcoholism and substance abuse in Indian Country. In 1992, Congress amended PL 94-437, the *Indian Health Care Improvement Act of 1976* with PL 102-573, the *Indian Health Care Amendments of 1992*. Section 703 of these Amendments, titled "Indian Women Treatment Programs," requires the IHS to develop and implement comprehensive alcohol and substance abuse prevention, intervention, treatment, and relapse prevention services that specifically address the cultural, historical, social, and child care needs of Indian women, regardless of age. Section 801 of these Amendments requires a report on the progress made in meeting the objectives of the Act, a review of programs established or assisted pursuant to the Act, and an assessment of such programs.

As of 1994, IHS funded over 300 tribal A/SA treatment programs; however, little information has been available on the success of the programs and on the services needed by and available to AI/AN women. Because sufficient resources were not available to fully fund a prospective treatment outcome study, in 1994 the IHS initiated the first phase of a planned multi-phase study to provide the needed information. The first two phases of the study have been reported elsewhere.[5] In 1995, IHS awarded a contract to Support Services International, Inc. (SSI) working with Abt Associates, Inc. (Abt) as a subcontractor to conduct phases 3 and 4 of the study. This document reports the phase 3 and phase 4 results. In summary, the four study phases were:

1: Develop an evaluation design for the entire project,

2: Gather descriptive information on a sample of women served in the IHS-supported programs,

3: Conduct a prospective client outcome study, and

4: Evaluate the treatment services provided by the programs.

Phases 3 and 4 of the study included the following activities:

1) Site visits to a sample of the IHS-supported A/SA treatment centers serving AI/AN women with interviews of the center director and a sample of center staff, and collection of existing data and reports;

2) Interviews of a sample of women clients served by the treatment centers in the study; and

3) Follow-up interviews with the clients at 3-, 6-, and 12- months after admission to one of the treatment centers.

Because of problems in the obligation of funds for the study and in collecting study data, the study was terminated before all the goals could be met.

[5] *Phase 2 Final Report*, Center for Reproductive Health Policy Research, Institute for Health Policy Studies, University of California, San Francisco, December 1995, Contract No. 282-92-0048.

C. Technical Advisory Committee (TAC)

A Technical Advisory Committee (TAC) was convened to provide guidance and feedback on critical aspects of the study. The TAC consisted of eight women, the majority of whom are members of Federally recognized tribes and all of whom have expertise in Indian health, women's health, A/SA treatment and/or related areas. The IHS selected the individuals to serve on the TAC. In order to maintain continuity across the four phases of the study, a few of the original (Phase I) TAC were asked to continue serving for the current phases of the study. Because some TAC members could no longer serve, and to broaden tribal representation and technical expertise, additional members were added to the TAC. Attachment 2 lists the members of the TAC.

Early in Phase 3 of the study, the TAC met with project staff in Albuquerque to discuss the overall study design, data collection methods and instruments, and plans for conducting the study. Subsequent contact with the TAC was through monthly teleconferences. After data collection began, TAC members were apprized of progress and developments in the study through periodic newsletters or email. Because of problems in the obligation of study funding, the TAC was unable to review the final study report.

D. Related Research

A literature review was conducted of relevant studies and research. Attachment 3 presents a bibliography of sources reviewed. Salient points extracted from the review include:

- ❒ The triad of alcoholism, violence, and depression has been cited as the most serious social and health problems facing Indian women.

- ❒ Alcoholism figures prominently in morbidity and mortality among Indian women. It is the fifth most frequent cause of death for Indian women.

- ❒ The effects of chronic alcohol abuse by Indian women touches the lives of many of their children, contributing to dysfunctional family environments and neglect.

- ❒ In a study of a group of Northern Plains Indian women, more difficult life circumstances and less social support were related to drinking during pregnancy. Most of the women who showed no decrease in drinking during pregnancy experienced violence in their homes. These women experienced severe social stress, lack of support, and violent life circumstances, (e.g., physical and sex abuse).

- ❒ The loss of cultural ties and values have contributed to alcoholism in Indians. American Indian women who are away from their traditional centers of support, be they familial, spiritual or communal, appear to be at higher risk for alcohol abuse.

- ❒ Many of the existing social problems in Indian Country, especially those associated with

alcohol, are associated with the loss of traditional culture. Most of the community-based alcohol treatment programs in Indian communities across the country have a strong cultural or spiritual component that is intended to revitalize traditional beliefs and serve as the primary source of individual strength in maintaining sobriety.

- ❒ The severe alcohol abuse among Alaska Natives is associated with high rates of family violence. Examples include intergenerational violence in Alaska Native families.

- ❒ For American Indians addicted to alcohol or drugs, the attainment of sobriety involves spiritual, relational, and intergenerational healing.

- ❒ American Indian women who do not seek prenatal care have significantly more family dysfunction than women who seek such care. Infants of women with no prenatal care experience a disproportionate amount of adverse neonatal outcomes.

- ❒ American Indian women who drank during pregnancy were more likely to be single, have less education, and were less likely to have access to transportation than women who did not drink. In addition, women who drank during pregnancy were more likely to smoke cigarettes and use illicit drugs, to have parents who drank, or to have experienced more physical and emotional abuse.

- ❒ Among women, the best predictors of drinking through pregnancy were length of prior drinking experience, tolerance to alcohol, history of sibling drinking, and drinking with family members including the spouse or partner.

- ❒ Alcoholic women were significantly more likely to have experienced negative, moderate and severe partner violence than women in the general population.

- ❒ Heavy drinking for women is linked to anxiety, depression, low self-esteem, and suicide.

- ❒ Women metabolize alcohol differently than men; they achieve higher concentrations of alcohol in the blood after drinking equivalent amounts of alcohol as men.

- ❒ Women are more likely than men to suffer adverse consequences from drinking such as damage to the heart muscle, liver, and brain.

II. Method

A. Study Design

The study was a prospective evaluation of the treatment provided by IHS-supported A/SA programs serving AI/AN women, and of the outcomes experienced by a sample of these women admitted for such treatment during the period June 1998 through August 2000. The women in the sample were followed-up at 3-, 6-, and 12-months after admission to treatment.

This is a descriptive study—there were no experimental controls or control groups. The study was designed to describe the programs providing treatment, the women served, the services needed and received, and the outcomes experienced by the women in the study.

B. Sampling

1. Treatment Center Sample.

The treatment center population was the 312 IHS-funded treatment programs that served AI/AN women as of October 1, 1996.[6] The number of AI/AN women served by each of these centers was estimated based on information provided by the centers and by the IHS. The treatment centers were stratified by IHS Area with the Tucson and Phoenix Areas combined. Two treatment centers were randomly selected in each IHS Area with the probability of selection proportionate to the number of women served in 1996. Thus, women served by large and small treatment centers had roughly the same chance of being selected to participate in the study. There were 22 centers in the original study sample.[7]

After site visits had been conducted, two of the treatment centers dropped out of the study, and were replaced by alternate centers. While no client data were collected from the two centers that dropped out, center staff interviews had been completed. Therefore, the center sample includes 24 centers–two from each of the 11 IHS Areas (Phoenix and Tucson Areas combined) plus the two centers that dropped out of the study–both from the Portland Area. Table 1 provides information about the treatment centers in the study sample.

[6]While some of the study sites operated as a single, unitary program, other sites operated multiple treatment programs. For the sake of consistency, all study sites are referred to as "treatment centers," even those with a single, unitary program.

[7]The initial sample for treatment centers included 4 from each of the 11 IHS Areas (2 primary sites,, and 2 alternates). See Attachment 4 for information on the study sample.

Table 1. Planned and collected sample data

IHS Area	Treatment Center	Center Type	Client Sample	Client Data Collected	Staff Sample	Staff Data Collected
Aberdeen	ITC of Omaha, NE	IP	21	21	4	4
	Dakota Pride, SD	IP	10	8	7	4
Alaska	Dena A Coy, AK	IP	17	5	12	12
	WCRP, AK	IP	13	13	9	9
Albuquerque	Eagle Lodge, CO	IP/OP	17	10	6	4
	Acoma, NM	OP	18	0	4	4
Bemidji	Northern Winds Tx Ctr., MN	IP	8	7	8	7
	Oneida, WI	IP/OP	19	7	8	7
Billings	Blackfeet, MT	IP/OP	29	5	9	8
	Spotted Bull, MT	OP	32	3	5	5
California	AIFHC, CA	IP	8	0	9	7
	Sonoma County Indian Health Ctr., CA	OP	18	12	3	3
Nashville	St. Regis Mohawk, NY	IP/OP	21	21	19	8
	Eastern Band of Cherokee, NC	IP/OP	9	4	5	5
Navajo	Na Nazhoozi (NCI), NM	IP	50	6	10	10
	Crownpoint, NM*	OP	55	No site visit	14	-
Oklahoma	Creek Nation, OK	OP	24	3	5	5
	Choctaw Nation, OK	IP/OP	19	3	5	5
Phoenix/ Tucson	Indian Rehab.Inc/GSL. AZ*	IP/OP	56	23	15	15
	Rainbow Tx. Ctr., AZ	IP/OP	30	5	7	6
Portland (includes the 2 sites dropped)	NARA, NW, OR	IP/OP	21	21	13	11
	Thunderbird Tx. Ctr.,WA	IP/OP	14	7	7	6
	Puyallup, WA- DROPPED	IP/OP	n/a	0	30	13
	Lummi, WA- DROPPED	IOP	n/a	0	6	6
	TOTAL		509	184	220	142

*NOTE: No site visit was made to Crownpoint because of delays in obtaining IRB approval. Also, during the study, IRI/GSl in Phoenix underwent reorganization and name change to Native Connections, Inc. For the purposes of this study, however, the name IRI/GSL will be used.
Legend: IP=Inpatient/Residential; OP=Outpatient; IOP=Intensive Outpatient

2. Treatment Center Staff Sample.

Twenty-two center directors were interviewed. In addition, a sample of staff was interviewed at each center; the number of staff interviewed ranged from 3 to 15, depending on the number of staff employed. Persons in the following positions were interviewed: center director, clinical supervisor, primary counselor, counselors, intake specialists, aftercare specialists, counselors in training (CITs), behavioral technicians, and nursing staff. Because the staff sample included key staff from each treatment center (e.g., director, clinical director), but only a sample of other staff (e.g., counselors, counselor aides), the sample included disproportionate numbers of senior staff.

3. Client Sample.

The client population was estimated to number 3,535 AI/AN women served by the 312 treatment centers funded by IHS as of October 1996. It was anticipated that there were sufficient resources available to collect information on and to follow-up a sample of 509 AI/AN women clients. Each of the 22 centers in the sample was assigned a quota of women clients to enroll in the study based on the number of such clients served in 1997. The 22 treatment centers and the quota of women clients assigned to each treatment center are presented in Table 1.[8] The client sample included women accepted for treatment by the 22 centers participating in the study beginning on or around June 15, 1998 until the required sample quota was reached, or until data collection was terminated on August 30, 2000.

It was anticipated that, for a variety of reasons, there would be an incremental loss of persons from the client sample over the life of the study. It was estimated that at the time of the 12-month follow-up interviews, data would be collected from about 412 clients, about 80 percent of the original sample. However, two centers were unable to enroll any clients in the study, and many centers were unable to meet their sample quotas. In total, the treatment centers were able to collect data for only 184 women clients. There was a wide range in the performance of treatment centers in collecting client data. Center perfomance in enrolling clients in the study seemed to be associated with resources available and overall center management.

C. Data Collection Instruments (DCIs)

Nine DCIs were developed in this study. Copies of these DCIs are found in Attachment 5, and the DCIs are described, by data source, below.

1. Treatment center staff. Two DCIs were developed for on-site interviews of treatment center staff–one for the director and one for other center staff.

2. Client data collected by treatment center staff. Treatment center staff collected information from clients using client Intake and History DCIs. A third instrument, the

[8]The two treatment centers that dropped out of the study are included in Table 1. No client quotas were assigned and no women were enrolled in the study at the two centers that dropped out of the study.

Treatment Summary, was completed by treatment center staff (usually the Primary Counselor) based on the services provided, client activities, and client interviews during treatment.

3. Client outcome data. Interviews of the AI/AN women clients were conducted at 3-, 6-, and 12-months after admission to the treatment center, using corresponding DCIs.

4. Site visit checklist. This instrument was used to record descriptive information on the treatment centers during the site visit tour and inspection of the facilities at the centers.

Major portions of the DCIs were adapted from the CATOR instruments widely used in assessing alcohol/substance abuse treatment outcomes.[9]

D. Data Collection Team

The data collection team was comprised of eight women who are members of federally-recognized tribes. They had expertise and experience in issues relating to A/SA treatment, Indian health, and women's health. Most team members have advanced degrees in areas relevant to this study. Attachment 6 includes a list of the data collection team. Two members of the TAC also served on the data collection team.

E. Data Collection Procedures

1. Site Visits.

During 3-5 day site visits, the treatment center director and a sample of treatment center staff were interviewed, the facilities inspected, existing data and reports were collected, and selected center staff were trained to collect client data using the Intake, History, and Treatment Summary DCIs. Each of these activities is described below.

1.1. Interviews of treatment center directors. Face-to-face interviews were conducted with the 22 treatment center directors. The directors and other staff members signed *Informed Consent Forms* before interviews were conducted. Data collection included the knowledge, opinions, and judgments of the director on topics such as:

- ❒ Factors affecting center success and efficiency
- ❒ Treatment modalities and approaches
- ❒ Successful practices implemented
- ❒ Major problems encountered and solutions developed
- ❒ Significant trends at the treatment center
- ❒ Suggestions for center improvement.

[9]The CATOR instruments were developed by Dr. Norman Hoffmann, the Principal Investigator for this study.

1.2. Interviews of treatment center staff. Face-to-face interviews were conducted with a sample of treatment center staff. Staff interviews included questions about the person's position and responsibilities, training, experience and qualifications. Additional information similar to that collected in the director interviews was collected.

1.3. Inspection of facility. During the site visit, members of the data collection team toured the treatment facility and completed the site visit checklist. The checklist included such items as observations/description of the facilities, facilities/services for children, exercise and recreational facilities, etc.

1.4. Collection of secondary information. A variety of secondary information was collected from the treatment centers. Documents collected included descriptive information, brochures, sample client charts, copies of evaluations, admission criteria, mission statements, program standards and annual reports. Availability of secondary information varied across the treatment centers. For example, one center was in the process or reorganization after a brief suspension of service and brochures and mission statements were unavailable at the time of the site visit. During the course of the study, however, the information was provided, by the center.

1.5. Exit interview. After the training was completed and staff interviews conducted, an exit interview was conducted with the director and any designated staff. During this meeting, any questions by the center staff were answered, and, if necessary, arrangements were made to obtain additional secondary information from the treatment center.

1.6. Site visit summary. After the site visit was completed, the members of the data collection team prepared a site visit summary. Attachment 7 contains a copy of the form for preparing this report. The Summary was submitted to the IHS Project Officer with the monthly progress reports. Attachment 7 also contains an example of a site visit schedule and agenda.

2. Collection of Client Data by Treatment Center Staff.

Based on the size of the program, each treatment center in the study was assigned a quota of clients to be enrolled in the study. Beginning on a specified date, the center would enroll each AI/AN woman who agreed to participate in the study. The beginning of data collection was determined by receipt of the relevant approvals for the study from the Office of Management and Budget (OMB), the IHS National Institutional Review Board (IRB), Area IHS IRBs, and where appropriate, the relevant tribal governing entities. Receipt of such approvals was extended over 26 months; some Areas quickly granted approval, and others took much longer. For example, the Navajo Nation Health Research Review Board (NNHRRB) took 2 years to grant approval for the study. Because of the variation in time required to obtain approval of the study, client enrollment in the study spanned the period June 15, 1998 through August 30, 2000.

2.1. Training treatment center staff to collect client data. During the site visits to the treatment centers, staff members, selected by the center director, were trained to collect client data using the Intake, History, and Treatment Summary DCIs developed for the study. The training included overview of the study goals, objectives, sampling, DCIs and data collection procedures, and

compensation for women who participate in the study. Center staff were encouraged to contact the study manager if they had any questions or encountered any problems in collecting client data. The study manager was in frequent contact with the centers to facilitate the collection and transmittal of client data. The treatment centers were reimbursed for each set of completed client interviews received by the study contractor.

2.2. Data collection procedures. Treatment center staff completed the Client Intake DCI within 24 hours of admission of the client to the center. The Client Treatment Summary DCI was completed within 2 weeks of the client's completion of treatment or discharge from the center. The types of data collected from the clients by the treatment centers are outlined below; the actual DCIs are in Attachment 5. Clients enrolled in the study were briefed and signed an *Informed Consent Form* before interviews were conducted.

Client Intake Interview (conducted upon admission to the treatment center).

- ❒ Demographic data (age, educational level, marital status)
- ❒ Tribal affiliation
- ❒ Referral source and reason for referral
- ❒ Other A/SA treatment services received in last 30 days
- ❒ Treatment goals/self assessment of chemical dependence
- ❒ Alcohol/other drug usage patterns, last ingestion
- ❒ Medical problems (e.g., diabetes, high blood pressure)
- ❒ Names, addresses, and telephone numbers of 4 persons likely to know how to reach the client after she leaves the center (to facilitate collecting follow-up data).

Client History Interview (conducted within 2 weeks after admission to treatment center)

- ❒ Usual living arrangement (e.g., living alone, with children, spouse/companion)
- ❒ Life events in last year (e.g., deaths, moves, arrests, other legal problems)
- ❒ Work status in last year
- ❒ Participation in tribal activities and ceremonies
- ❒ Use of alcohol and/or other drugs
- ❒ Longest length of time (in weeks) drug/alcohol free in last year
- ❒ Presence of others in household who abuse alcohol/other drugs
- ❒ Previous treatment for substance abuse
- ❒ Previous treatment for mental health problems
- ❒ Physical and/or sex abuse.

Client Treatment Summary (completed upon treatment completion or leaving the center)

- ❒ Client status (completed program, dropped-out, referred to another facility)
- ❒ Types of treatment needed and received
- ❒ Self-identification of A/SA problem at discharge
- ❒ Use of alcohol or other drugs during treatment
- ❒ Referrals to post-discharge aftercare
- ❒ Social support available (family, friends, community)
- ❒ Counselor's prognostic impression.

2.3. Confidentiality/privacy of data. Data collected during this study were maintained in accordance with all requirements of applicable confidentiality regulations (e.g., Privacy Act regulations in 45 CFR 5b). In addition, a *Certificate of Confidentiality* was obtained from the National Institute of Alcohol Abuse and Alcoholism (NIAAA) for data collected during this study. All study participants and center staff were told that their judgments, opinions, and other information would remain anonymous.

2.4. Processing client data received from the treatment centers. The treatment centers mailed batches of completed DCIs to the study contractor which provided prepaid, pre-addressed FedEx envelopes and labels for returning completed DCIs for processing. Upon receipt, the completed DCIs were logged in and processed:

1) Each DCI received was date stamped
2) Key data were recorded on the project receipt log including client ID, DCI type, date received, date and amount of compensation sent to treatment center
3) Data were automated, verified, and incorporated in the study database
4) The dates for the 3-, 6-, and 12-month client follow-up interviews were determined and scheduled, and
5) Clients were provided a laminated ID card that contained the names and toll-free telephone numbers of the study manager and director, the compensation for completing each interview, and the dates for the follow-up interviews. The clients were asked to call the contractor at a convenient time on the dates scheduled for the 3-, 6-, and 12-month interviews.

3. Collection of Client Outcome Data.

Client outcome data were collected by telephone interviews at 3-, 6-, and 12-months after starting treatment using the corresponding DCIs. Most of these interviews were conducted by contractor staff; however, staff at three study sites collected follow-up data for clients at their centers. The follow-up interviews solicited information in areas such as:

- ❒ Program components that were most helpful and those that were least helpful to the client's recovery
- ❒ General status (and current adjustment)
- ❒ Life events/life stressors experienced
- ❒ Changes in marital status, living arrangement, custody of children
- ❒ Participation in tribal ceremonies/activities
- ❒ Use of alcohol and other drugs
- ❒ Barriers to recovery
- ❒ Social supports.

While some clients initiated follow-up interviews by calling the study toll-free telephone number, most of these interviews were initiated by study staff. When clients were difficult to contact (e.g., had moved, had no fixed address or telephone), efforts were made to contact the client through persons identified by the client at intake. The completed follow-up DCIs were automated and processed much like the other client DCIs.

4. Compensation to Clients and Treatment Centers.

Clients were compensated for their time and contributions to the study with gift certificates (honored by a variety/drygoods or grocery store) or "telephone cards" in accordance with the following schedule:

- ❒ 3-month interview- $10.00
- ❒ 6-month interview- $15.00
- ❒ 12-month interview- $20.00.

Treatment centers were compensated $25.00 for each set of Intake, History, and Treatment Summary DCIs completed and received by the study contractor.

F. Data Analysis

The study data were processed and analyzed in several steps. The first step involved automation and tabulation to identify outliers and apparent errors. To a considerable degree, the automation process identified mistakes and inconsistent coding of the questionnaires by specifying acceptable data values. For example, the date of the interview had to be a possible date (November 31 would be rejected) and the date had to be within 30 days of the timestamp/receipt for the DCI. Responses to open-ended questions were coded by one of two study staff who had been trained to achieve the required level of inter-rater reliability (90% agreement).

In general, the data analysis was guided by the study areas identified by the IHS (see Attachment 1). Descriptive statistics were computed and graphic displays were developed to answer questions about the characteristics of treatment center staff and the women served. A number of composite measures were computed by summing scores on component variables. Examples of composite variables include measures of depression, life events/stressors, polydrug use, level of addiction, level of spouse/partner abuse. Details about the composite measures are presented in Attachment 8.

Both parametric (e.g., Pearson correlations, discriminant analysis, regression analysis) and nonparametric (e.g., chi square, loglinear models) statistics and analyses were performed to answer questions about factors associated with successful and unsuccessful treatment outcomes such as sobriety, harm reduction, improvement in health and in quality of life.

G. Problems Encountered in Data Collection

There were a series of challenges and complications in carrying out this study. Many of these problems are shared by most health research conducted in Indian Country and may be of interest to researchers, policymakers, and others. These major problems are summarized below.

1. The Burden of the Research on the Treatment Centers.

At the time of the study, some of the treatment centers were operating in a crisis or near-crisis mode. Factors contributing to the crisis mode included staff turnover (including change in center director)

and associated lack of "institutional memory," conflict between center management and that of other tribal programs, lack of training for center staff, and a sense of futility associated with high rates of unemployment, poverty, and restricted opportunities found in some parts of Indian country. Treatment centers operating in a crisis mode tended to be unable to cope with the burdens of enrolling clients in the study, collecting additional client data, and sending it to the study contractor over a period of 12 months or more. While payments to the treatment centers for collecting the Client Intake, History, and Treatment Summary data were helpful, such payments were, for the most part, irrelevant to the issues precipitating the crisis faced by some treatment centers.

2. Obtaining Clearance from OMB, IHS Area IRBs and from Tribes.

Securing review and approval for the study was a lengthy but simple process at most of the Area IRBs; however, at the Navajo Nation IRB (Navajo Nation Health Research Review Board–NNHRRB), the review/approval process stretched over a 2-year period with the result that almost no data could be collected from that Area. Other researchers applying for approval reported that such a lengthy time period was not unusual at the Navajo Area. Several factors seemed to influence the time required for review. One factor was that the IRB staff repeatedly misplaced the application for approval– the application and 9 copies were sent to the IRB four times over a 1-year period. A second factor that apparently influenced the IRB was a breech of confidentiality and failure by other federally sponsored research to comply with the IRB requirements. Consequently, the IRB was examining requests with special care and was reluctant to approve studies until the costs and benefits of the research were fully examined. Such review seems especially appropriate when research, such as the present study, involves an "at risk" population.

Many tribes require review/approval of any research involving their programs or members. As with IRB review/approval, in most cases few problems were experienced in securing tribal approval of the study. Nevertheless, obtaining OMB, IHS Area IRB, and tribal approval of proposed research requires a minimum of 6 months and can stretch out for years. In addition, the process requires a significant amount of staff time to prepare required documents, respond to questions and, sometimes, to make personal presentations to the tribal organization and/or Area IRB.

3. Collecting Follow-up Data.

Missing or not in service telephone numbers. Many clients in the study did not have their own telephone, and gave a telephone number for the closest relative or often the treatment center. At intake, each client was asked to provide the names, addresses, and telephone numbers of four people who would know their whereabouts for purposes of conducting the follow-up interviews. In some geographic areas, the southwest and parts of the northwest, many of these contacts did not have telephone numbers. In situations like this, the counselors were contacted for additional information, as they usually maintained contact with the clients after completion of treatment. In addition, letters were written to the primary contact listed on the intake form, explaining the need to contact the client, and asking that the contact person get a message to the client. Some clients who did not have a home telephone number could be reached at work. Arrangements were made for the follow-up interviews to be conducted after the client left work. Other clients have gotten jobs at casinos and could only be reached on the job at odd hours. It was not uncommon for a telephone number to be

out of service for a period of time, then be reconnected. Clients reported that sometimes they did not have the financial resources to pay the telephone bill and meet their other financial responsibilities.

Many dedicated and caring counselors took the extra step to work on weekends and off-hours to accommodate the needs and special circumstances of the clients. These counselors were very helpful in facilitating the collection of follow-up client data. Sometimes these counselors would complete the follow-up DCI, and at other times they would persuade the clients to use the toll-free telephone number for the follow-up interview.

Moving to new address. Findings from the follow-up interviews show that 30 - 40 percent of the clients changed addresses during each of the follow-up periods (3-, 6-, and 12-months). Mothers or aunts were very helpful in providing information for tracking clients. In general, women were helpful in providing tracking information; men (partners, boyfriends, etc) on the other hand, tended to be less helpful. While some were cordial enough on the phone, many failed to pass on messages to the women clients. Sometimes partners/boyfriends were belligerent and expressed anger at the client, and indicated they wished never to hear about her again.

Shame. Some clients who had relapsed felt too much shame to participate in the follow-up interviews (this information was shared by some of the counselors). By talking with the clients, sometimes the counselors could provide the follow-up information.

Clients in prisons. A few clients were incarcerated during the follow-up period. Follow-up interviews with such clients involved a unique set of circumstances. Interview sessions were limited to 15 minutes, the interview was likely to be monitored by a supervisor, and, an appointment had to be made in advance to interview the client.

Homelessness. There were a few clients who were homeless. Occasionally they did drop by the treatment centers for aftercare treatment sessions. During these times, counselors would get a message to them to call SSI for a follow-up interview. Some clients did call, using the study toll free telephone number.

Alaska. Alaska presents a unique set of circumstances. The staff at the two treatment centers in Alaska conducted their own follow-up interviews. In one Alaska site, the staff indicated that it took on the average four hours to complete a follow-up interview, often spanning a few days. After leaving treatment, the clients may lack a fixed address. Thus, the staff would get what information they could, and wait till the client was available to complete the interview.

III. Findings

The study findings are organized into four sections. The first section describes the characteristics and needs of the women clients served by the treatment centers; the second describes the treatment center staff and project directors; the third presents a profile of 23 treatment centers in the sample; and the fourth describes client outcomes and factors affecting these outcomes.

A. Description of Women Served

This section describes the characteristics and life circumstances of the women served by the IHS-supported treatment centers in the study. The descriptions are based on data for the 184 women who completed the Intake and History interviews. Where possible, the data are compared with IHS population data.

1. Demographics.

1.1. Age. Client ages ranged from 19 to 59 years of age, with 41 percent falling in the age category 25 to 34 (see Table 2).

Table 2. Comparison of age distributions for clients and IHS service population

	Clients		IHS Service Population
Age[10]	Number	Percent	Percent
Birth-14	0	0%	34%
15-24	27	15%	17%
25-34	46	41%	17%
35-44	62	33%	13%
45-54	15	8%	8%
55+	3	2%	11%
No DOB	1	1%	0%
TOTAL	184	100%	100%

As shown in Table 2, the percentage of clients over 55 years old (2%) was much smaller than a comparable age cohort in the IHS service population (11%).[11] Conversely, the percentage of clients in the 25-34 and 35-44 age range was much greater than the comparable cohorts in the IHS service population. In response to a question on changes in the treatment population over time, several center directors said that there is a trend of women presenting for treatment at an earlier age.

[10]These age categories were used to facilitate comparisons with comparable data from the IHS. There are no clients in the first age category of birth-14 years of age.

[11]*Trends in Indian Health*, IHS, Rockville, MD. 1997.

1.2. Education. Slightly over one-third (36%) of the clients lacked a high school degree or equivalent; 50 percent had a high school degree or GED. Seven percent reported having a Bachelor's degree, and 7 percent had either a voc/tech degree or college certificate. Adding the percentages of clients with a high school degree (or equivalent) and higher yields 64 percent–roughly equivalent to the 65 percent reported for American Indians in the 1990 Census; however, the percentage of clients with a Bachelor's degree or higher (7%) is lower than that reported for American Indians in the 1990 census (9%).[12]

Almost one-third (30%) of the clients reported that they had attended a BIA boarding school; of these clients, the majority (65%) reported that they attended BIA boarding schools exclusively. It has been argued that substance abuse is or has been more prevalent in the BIA boarding schools than in reservation communities. While the proportion of AI/AN women residing in the IHS service area who attended BIA boarding schools is unknown, it seems likely that it is less than 30 percent.

1.3. Income/financial assistance. Most of the clients in the study were poor. Clients were asked about their annual income, total family income, and other sources of financial assistance for the 12-month period prior to beginning treatment. Almost half of the clients (47%) reported that they received some type of support or assistance from programs such as Temporary Assistance for Needy Families (TANF), Food Stamps, or BIA-funded General Assistance. Table 3 shows that the majority (61%) of clients had an annual income of less than $10,000; similarly, nearly half of the clients had a total family income of less than $10,000.

Table 3. Annual income of clients and their households

	Client Income		Total Family Income	
Income Category	**n**	**(%)**	**n**	**(%)**
Less than $10,000	106	(61%)	85	(48%)
$10,000 to $20,000	26	(15%)	25	(14%)
$20,001 to $30,000	6	(3%)	13	(7%)
$30,001 to $50,000	2	(1%)	7	(4%)
Over $50,000	0	(0%)	4	(2%)
Don't want to say	34	(20%)	41	(24%)
Total	174	(100%)	174	(100%)

1.4. Employment. Unemployment is associated with substance abuse for the women in the study. Prior to beginning treatment, the majority (61%) of the clients were unemployed–a percentage dramatically higher than the 13 percent reported in the 1990 Census for Indian women 16 years and older residing in Indian country.[13] In a separate item focusing on life stressors, 40 percent of the

[12]Id. Education data for the IHS service population are unavailable.

[13]Id.

respondents reported that they had lost their job in the 12-month period prior to entering treatment. In addition to the high rate of unemployment among the clients, 32 percent reported that they had been employed part-time.

1.5. Client self-description. The majority of the clients in the study were single parents, and few were students, retired, or disabled. Clients were asked to select among six categories, those that best described their current circumstances. "Single parent" was selected by the majority (52%) of clients and almost one-half (48%) selected "homemaker." Fewer than 10 percent selected the "part-time student," "full-time student," or "disabled person" categories (see Table 4).

Table 4. Client self-description

Category	n	%
Single parent	90	52%
Homemaker	84	48%
Full-time student	9	5%
Part time student	9	5%
Disabled person	9	5%
Retired person	1	<1%

1.6. Current and past living arrangements. Most of the clients in the study lived with their children, a spouse/partner, or a relative. Clients were asked several questions about their living arrangement prior to entering treatment. Over 10 percent said that they had no home, and over 15 percent were living with relatives. These data probably reflect the shortage of adequate housing in Indian country as well as effects of the abuse of alcohol and other drugs. The most common living arrangements were with children (47%), with a spouse/partner (37%) and with parents (22%).[14] The majority of clients said they had more than one option for their usual living arrangement; only 9 reported living alone as their only arrangement. With a high rate of unemployment, many clients may lack the necessary resources to rent and furnish their own home.

The majority of clients (51%) were raised by both parents (or parent surrogates such as foster parents). Over one-third of the clients (34%) were raised by a single parent, and 24 percent were raised by grandparents–the percentages sum to more than 100 because many clients indicated that they experienced more than one family constellation. For example, they may have lived with both parents for many years and then with a grandparent either separately or in the same household as their parents.

Table 5 shows that when growing up, the majority (62%) of clients lived on a reservation or in an Alaska Native village; only 20 percent lived in an urban area. This pattern of residence continued for the clients with the majority (56%) currently residing on reservations or Native villages. However, there is a trend towards decrease in the numbers from the reservation/Alaska Native village and rural areas and an increase in the numbers who currently live in towns and urban areas.

[14]The living arrangement categories are not mutually exclusive; thus the percentages can total more than 100 percent.

Table 5. Where clients grew up and where they live now

Where clients grew up	n	%	Where clients live now	n	%
Reservation/Alaska Native village	108	62%	Reservation/Alaska Native village	97	56%
Rural area	18	10%	Rural area	13	7%
Town	12	7%	Town	20	11%
Urban Area	36	21%	Urban Area	42	24%
Population: Rural: 10,000 or less; town: 10,000 - 50,000; urban: over 50,000					

1.7. Marital status. The majority of clients were single–either never married (48%) or divorced (13%). Ten percent were married, and 11 percent were common law/living as married; 17 percent were separated. The majority (52%) of clients were single parents.

1.8. Children. Children seem to play a pivotal role in many aspects of the clients' treatment. Most (85%) clients had children, and the majority (58%) had children under the age of 18 living with them; 15 percent had given birth in the year before entering the treatment center. Interviews with center staff suggested that the actual or threatened loss of custody of children often precipitated a woman's decision to enter treatment. On the other hand, staff said that women substance abusers tend to refuse to enter into residential treatment if it means having to be separated from their children. One center director reported that some women forced to go to treatment (by tribal courts, CPS, etc.) will violate center policies and rules in order to get discharged from treatment and return to their children. When asked to list the best things in their lives, the majority of clients listed "my kids" as the first choice.

2. Client Self-Concept and Assessment.

Clients were asked to rate themselves on a series of 4-point bipolar scales that measured their self-concept and assessment. Table 6 shows that many clients had a positive self-concept. The majority of clients somewhat or strongly agreed with statements of overall "satisfaction with self" and of "having a lot of good qualities." Conversely, the majority of clients somewhat or strongly disagreed with statements of "being no good at all" and of "feeling like a failure."

Table 6. Client self-concept and assessment ratings

Statements	Strongly Disagree 1	Somewhat Disagree 2	Somewhat Agree 3	Strongly Agree 4
All in all, I'm satisfied with myself.	6 (3%)	30 (17%)	68 (39%)	66 (38%)
At times, I think I'm no good at all.	55 (32%)	42 (24%)	59 (34%)	11 (6%)
I feel that I have a lot of good qualities.	2 (1%)	12 (7%)	59 (34%)	97 (56%)
I wish I could have more respect for myself.	37 (21%)	20 (11%)	49 (28%)	62 (35%)
All in all, I feel that I'm a failure.	99 (57%)	36 (21%)	28 (16%)	7 (4%)

2.1. Client's greatest strengths. Clients were asked what they considered to be their greatest strengths. As shown in Table 7, determination/courage/positive attitude was the most frequent response.

Table 7. Clients' greatest strengths

Strengths	n	%
Determination/courage/positive attitude	63	38%
Spirituality	48	29%
Her children	21	13%
Compassion/loyalty	21	13%
Belief in self	19	12%
Honesty	14	8%
Desire to be sober	12	7%

2.2. Best things in clients life. When asked to list the best things in their life, 72% of clients said "my kids/children." Family (30%) and sobriety (29%) were the other categories most frequently listed.

3. Alcohol and Substance Abuse History.

For major groups of drugs, clients were asked if they used the drug, the intensity of use, and the ages of first and last use. Alcohol (by 97%), marijuana (by 78%), and tobacco (80%) were the substances used most by clients in the study (see Table 8). Alcohol, inhalants, and tobacco, each with a median age of first use of 13 years, were the first substances used by the clients, followed by marijuana with a median age of 14.

Table 8. Alcohol and substance abuse history

Substances	n	%	Age range at first use	Median age at first use	Mean age at first use
a. Alcohol, beer, wine	168	97%	5 - 38	13	13.7
b. Marijuana, hashish	137	78%	10 - 45	14	15.0
c. Cocaine, crack	94	54%	13 - 45	21	22.7
d. Amphetamines	67	38%	8 - 45	19	21.7
e. Barbiturates	24	14%	9 - 44	18	20.8
f. Opiates (heroin, morphine, methadone)	22	13%	12 - 49	20	22.3
g. Tranquilizers (Valium, xanax)	27	15%	14 - 36	21.5	22.4
h. Hallucinogens	36	21%	10 - 44	16	17.6
i. Painkillers (Demerol, codeine, percodan)	32	18%	10 - 41	18.5	23.3
j. Inhalants (glue, paint, gasoline)	31	18%	7 - 32	13	13.5
k. Tobacco (cigarette, snuff, chewing)	130	80%	7 - 43	13	14.9

During the intake process, most clients (79%) admitted to having a chemical dependency (CD) problem; conversely, 7 percent denied they had a chemical dependency problem, and 15 percent expressed ambivalence to admitting they were chemically dependent.

4. Factors Associated with A/SA.

Factors associated with alcohol and substance abuse include being a victim of physical, sex or emotional abuse; life stressors; family A/SA use; and arrests. The nature of these associations is described in the following sections.

4.1. Physical/sex/emotional abuse. Most of the clients were victims of physical abuse (88%), sex abuse (54%), or emotional abuse (75%), and such abuse seems to play a critical role in the clients' involvement in alcohol and other drugs (see Table 9).

Table 9. Client abuse and age of first abuse

Type of Abuse	Percent abused	Median age 1st time	Age range 1st time
Physical	88%	12	1 - 52
Sex	54%	8	2 - 49
Emotional	75%	10	2 - 56

Clients were asked which drugs they had ever abused and the age when they first used each drug. While the clients had abused many types of drugs, the three types of drugs most commonly abused were alcohol (97%), marijuana (78%), and tobacco (80%). The age of first use of alcohol ranged from 5 to 38 years old with a median age of 13 years. The median age for tobacco was also 13 years, and the median age for marijuana was 14 years old (see Table 10).

Comparison of Tables 9 and 10 reveals that on the average, the clients had been abused *before* they began to abuse alcohol or other drugs. Regression analyses confirmed that there were significant associations among age of first abuse (physical, sex, and/or emotional) and age of first use of alcohol and other drugs.

Table 10. Age of first use of alcohol and other drugs

Substance	Percent reporting abuse	Median age 1st time	Age range 1st time
Alcohol	97%	13	5 - 38
Marijuana	78%	14	10 - 45
Tobacco	80%	13	7 - 43

Separate regression analyses examined the individual and joint effects of age when first abused (for each type of abuse) separately on age of first use of alcohol, marijuana, and tobacco. Not every type of abuse was related to each type of drug used. Age when first emotionally abused was significantly related to age of first use of alcohol ($F=3.6$, $df=2,68$, $p<.04$, $R^2=.10$) and age of first use of tobacco

(F=8.6, df=1,94, p<.004; R^2=.08). Age when first physically abused was significantly associated with age marijuana first used (F=11.0, df=1,74, p<.003; R^2=.15). These analyses suggest that among the many factors that influence girls to use the three most commonly abused drugs (alcohol, marijuana, and tobacco) is the trauma of being abused, with emotional abuse seeming to be at least as damaging as sexual and physical abuse.

Clients were asked to describe some aspects of the abuse they experienced. Of those clients who experienced abuse, over one-half were victimized by more than one perpetrator. The relation of the perpetrator to the client varied with the type of abuse (see Table 11). A spouse or boyfriend was most often the perpetrator of physical (76%) and emotional (53%) abuse; family members were more common perpetrators of sex abuse of the clients (30%).

Table 11. Perpetrators of client abuse

Perpetrator	Physical		Sex		Emotional	
	n	%	n	%	n	%
Spouse/boyfriend	123	76%	34	20%	92	53%
Family member	86	49%	52	30%	77	44%
Acquaintance/Friend	27	16%	31	18%	42	24%
Stranger	22	13%	30	17%	23	13%
Don't want to say	5	3%	8	5%	3	2%

4.2 Life events/stressors. Clients were asked about 12 categories of stressful life events and psychosocial problems experienced in the 12 month period prior to entering treatment. As shown in Table 12, the majority of the clients (71%) had experienced A/SA by family members, and legal problems associated with their own A/SA (67%).

A life stressor scale was constructed by aggregating the total number of events experienced by each client. Scores on the life stressor scale could range from 0 (no life event stressor experienced in the last 12 months) to 12–having experienced each of the 12 stressors (see Attachment 8 for detailed information on this and other composite measures).

Table 12. Life events/stressors experienced by clients

(continued on next page)

Life Event/Stressor	n	%
Family alcohol/substance abuse	123	71%
Legal problems (arrest, DUI, custody)	116	67%
End of a relationship	77	44%
Death of a close friend/relative	70	40%
Loss of employment	69	40%

Table 12. (Continued)		
lost custody of children	68	39%
Move/change of address	65	37%
Family separation/divorce	46	26%
Death of a parent	27	15%
Pregnancy	34	20%
Other	31	18%
Miscarriage	12	7%

The "other" category of life events/stressors includes abuse (sex and physical), health problems, relationship problems, and dealing with emotions such as boredom and loneliness.

4.3. Family A/SA use. Most of the clients grew up in households where family members abused alcohol and other drugs (see Table 13). For the majority of the clients, alcohol or other drugs were abused by their fathers (71%), mothers (65%), and siblings (61%).

Table 13. A/SA by family members

	Alcohol		Other Drugs	
Relatives	**n**	**%**	**n**	**%**
Father	124	71%	27	16%
Mother	114	65%	23	13%
Siblings	106	61%	58	33%
Grandparents	54	31%	1	.5%
Other*	39	22%	13	7%
Don't Know	9	5%	6	3%

*Includes uncles, aunts, cousins, children.

4.4. Arrests or held by police for any reason during last year. Arrest was an important link in the chain of events leading to their entering into A/SA treatment. The majority of clients (65%) had been arrested in the 12 month period prior to entering treatment (some had multiple arrests), and 60 percent had been jailed overnight. The reasons for arrests are shown in Table 14.

Table 14. Reasons for arrest and frequency

Reasons for Arrest	Frequency		
	1	2	3+
Disorderly conduct	26	4	11
Assault or battery	30	6	2
Theft, robbery, burglary	15	1	3
Possession of drugs or drug paraphernalia	11	1	4
Vandalism	4	0	0
Sale of drugs	4	1	0
Prostitution	2	0	0
Other*	45	6	4

* Includes parole violation, DWI, child neglect, and trespass.

5. Reasons for Entering Treatment.

The majority of clients (61%) were ordered or required to enter into A/SA treatment for one or more of the following: court order (34%), Child Protection Services (22%), DWI offense (14%), or tribal court (9%).[15] The most common referral sources are listed in Table 15 (because many clients were referred by multiple sources, the percentages total more than 100). The majority of the clients (52%) included themselves as a source of their referral.

Table 15. Clients' most common referral sources

Referral Source	n	%
Self	96	52%
A/SA Treatment Program	40	22%
Social Services	35	19%
Other	35	19%
Outpatient clinic	34	18%
Family	25	14%
Tribe	19	10%
Tribal Court	26	14%
Child Protection Services	15	8%
Doctor/Provider	6	3%

[15]The percentages of clients ordered or required to participate in A/SA treatment by the four entities sum to more than 61% because some of the clients were required by more than one entity.

Treatment center staff were asked to indicate the primary sources of referral for women clients. All centers had multiple sources of referrals; they include tribal courts (82%), Child Protective Services (73%), other A/SA treatment programs (73%), family (68%), social services (59%), other tribes (59%), mental health worker (55%), outpatient clinic (55%), urban program (50%), and detox programs (45%).

Additional research is needed to determine why only 3 percent of the clients said they were referred for treatment by physicians or other health care providers. It may be that such referrals are made but not understood, accepted, recalled, or accurately reported by the clients. Alternatively, the providers may have failed to detect the need for a referral or have failed to make the referral. Certainly there were opportunities for referring the clients for A/SA treatment–184 clients reported 134 visits to emergency rooms, 313 visits to clinics, and 172 hospitalizations during the year prior to starting treatment. Nine of the center directors said that they receive referrals from doctors/providers. The centers that get referrals from doctors/providers are more likely to be affiliated with an IHS hospital or clinic. For example, two of the centers are in an IHS hospital or clinic. Another center in the study has a FAS Coordinator who works at the hospital to identify pregnant women who may be at risk for FAS/FAE problems.

Before entering treatment, some of the clients represented a danger to themselves and to others when operating a motor vehicle. Most clients (72%) reported that they drive. For the 12-months prior to entering treatment, 15 percent of the clients were involved in a motor vehicle accident as a driver and, of those who had such accidents, one-half had two or more accidents; 31 percent of the clients received a moving traffic violation.

5.1. Treatment goal and views about recovery. During the Intake interview, clients were asked to select among four treatment goals. Most clients selected a goal involving sobriety–to "make peace with not using alcohol or drugs" (56%) or to "stop drinking" (35%); 2 percent selected "not drink as much as you do now," and 7 percent selected the option, "other" (see Figure 1).

Figure 1. Treatment Goal

5.2. Previous A/SA treatment. Most clients (69%) had previously been in treatment. The number of previous treatment episodes ranged from 1 to 20 with a mean of 2.6 and a median of 2. Of those clients who had prior A/SA treatment, there were two clusters–those who had received treatment within the previous 6 months (27%), and those who had received treatment over 2 years earlier (49%); 11 percent had received treatment between 6-12 months earlier, and 13 percent received treatment between 13-24 months prior to the current treatment.

5.3. Selection of treatment center. Clients said that they chose the treatment center for a variety of reasons. Sometimes the tribe, probation officer, CPS or other referral source made the decision and the client had little input. However, for those situations where the client did make the decision, Table 16 illustrates the reasons for selection of treatment centers. This data is from the 3-month follow-up interview.

Table 16. Clients reasons for choosing a treatment center

Reasons (n=86)	n	%
Close to where client lives/convenient	24	28%
Was sent by her tribe/social services, etc.	18	21%
Program had good reputation	12	14%
Could take her kids	11	12%
Because it is an Indian program	8	9%
Only one available	4	5%
Program said they could help her get kids back	4	5%
Could get in quickly	4	5%
To be near her daughters	2	2%

6. Reasons for Completing Treatment.

The overriding reason clients give for completing treatment is related to regaining custody of their children. Clients want a good report for CPS, to keep their children or reunite with other children, or to comply with a court order. While completing the court ordered or mandated A/SA treatment, many clients begin to feel better about themselves, develop self esteem, and become empowered.

7. Recovery.

Asked what recovery meant to them, the clients spoke of healing, getting better for themselves and their families, being alive, and changing their outlook on life (see Table 17). Ninety-six percent of clients said they were totally committed to recovery.

Table 17. What recovery means to clients

Responses (n=166)	n	%
Not using alcohol or drugs	96	58%
Getting better for herself & her family	44	26%
Healing/getting in touch with self	32	19%
Changing attitude/outlook on life	17	10%
Her life/being alive	15	9%
Note: Numbers will add to more than 166 because multiple responses were allowed.		

7.1. What helps clients stop using alcohol and drugs. Clients reported a variety of aids that help them stop using alcohol and other substances (see Table 18). The four most frequently mentioned factors were 1) Alcohol Anonymous (AA) meetings, 2) spiritual activities/beliefs, 3) staying away from users, and 4) the treatment program. The most challenging factor will be staying away from friends and family who are users. Many women return to their communities after treatment, to the same environment, relationship, and friends. A woman who achieves sobriety may be pressured by her spouse/partner or friends to resume her former pattern of drinking or using drugs. Some clients reported that they do not venture out of their house because of the many temptations. Others reported that they make new friendships and avoid gatherings where alcohol and other drugs (AODs) will be used.

Table 18. Aids to help clients stop using AODs

Responses n=163	n	%
AA meetings	47	29%
Spiritual activities/beliefs	32	20%
Treatment Program	32	20%
Stay away from users	27	17%
Keeping in touch with support systems	24	15%
Self/own will power	20	12%
Desire to be with kids	16	10%
Choosing recovery/sobriety	15	9%
Changing life	14	8%
Note: Numbers will add to more than 163 because clients gave more than one response.		

7.2. Systems in place to help clients in recovery. The majority of clients identified at least two systems in place to help them in recovery. The system most frequently listed was family – including a range of relatives such as mother, brother, sister, grandmother, older kids, cousins, etc. The second most commonly mentioned support system was AA meetings. Others systems identified were child care, transportation, counselor, sponsor, and higher power.

7.3. Social Support Systems. Clients were asked the degree to which they participated in tribal social/cultural activities and spiritual activities. Most clients participated in some type of social/cultural activities (83%) and meditated or prayed (94%); almost one-half (47%) participated in tribal spiritual or ceremonial activities (see Table 19). In response to another question, 32 percent of the clients used tribal healing practices, or used the services of a Medicine Man/Medicine Woman or traditional healer.

Table 19. Participation in cultural and spiritual activities at time of intake

Practice/Activity	Frequency									
	Never		Less than once/month		Several times/month		Every week		Daily	
	n	%	n	%	n	%	n	%	n	%
Social/cultural activities (pow wows, dances, pot lucks,)	30	17%	97	56%	38	22%	9	5%	NA	
Spiritual/ceremonies (sweat lodge, Sundance, etc.)	78	44%	56	32%	26	15%	0	0%	0	0%
Meditate or Pray	11	6%	9	5%	11	6%	16	9%	127	73%

7.4. Sources of support in times of crisis. In times of crisis, clients turn first to their mother for support (23%); secondly they turn to their counselor (19%); and the third most frequent choice is AA meetings (15%). Other areas of support are friends (9%), treatment center (9%), spirituality (5%), other family members (aunt, grandmother, sister) (14%). Dad and spouse were listed by 3%.

8. Physical Health.

The clients used many health care resources. Clients were asked about their visits to the emergency room, stays in the hospital, and outpatient visits to clinics, doctors, etc. during the 12 month period prior to entering treatment. Table 20 summarizes the findings.

Table 20. Client hospital/ER/clinic/office visits

Reasons for Health Care	Times Hospitalized	Days Hospitalized	ER Visits	Office Visits
Detoxification	32	236	n/a	n/a
Alcohol/Drug treatment	29	467	n/a	128
Psychiatric care	9	59	11	24
Illness/injury/surgery	51	158	151	286
Pregnancy, miscarriage, childbirth, abortion	35	100	11	111
Routine exam	n/a	n/a	n/a	275
Other	16	28	64	67
TOTAL	172	1,048	237	891

8.1. Hospitalizations. As shown in Table 20, clients were hospitalized 172 times for a total of 1,048 days during the 12 month period prior to entering treatment. Some clients were hospitalized multiple times for each category in Table 20. For example, 12 clients were hospitalized 2 - 8 times for detox; 13 clients were hospitalized 2 - 6 times for A/SA treatment; 3 clients were hospitalized 2 - 7 times for psychiatric care; 26 clients were hospitalized 2 - 6 times for injuries, illness, or surgery; and 7 clients were hospitalized 2 - 5 times for pregnancy, childbirth, miscarriage, or abortion.

The number of days spent for a client's stay in the hospital ranged from one to 25 days for detox; 1 to 180 days for A/SA treatment; 1 to 21 days for psychiatric care; 1 - 21 days for illness and/or injury; 1 to 7 days for pregnancy/childbirth, miscarriage, abortion; and 1 to 7 days for "other" causes.

8.2. Emergency room care. Clients made 237 visits to the ER during the 12 months prior to entering treatment. Of these, 11 were made for psychiatric care; 151 were made for illness/injury, or surgery; 11 were made for pregnancy, abortion, miscarriage or childbirth, and 64 were made for "other" reasons. As shown, the majority of these visits were for illness, injury or surgery.

8.3. Visits to clinics or doctors' offices. Clients made 891 visits to a clinic or doctor's office. The majority of visits were for routine exams (275), illness/injury (286), and A/SA treatment (128).

8.4. Long term health problems. Physical conditions or illnesses requiring frequent medical attention were reported by 45 percent of clients during the Intake interview. Table 21 shows a list of the problems identified. The "other" category includes a broad range of disorders such as arthritis, asthma, Lymes disease, pancreatitis, kidney problems, thyroid problems, vision impairment, lupus, migraines, etc.

Table 21. Long-term health problems

Health problem	n	%
Diabetes	15	8%
Cancer	3	2%
High blood pressure	9	5%
Heart problems	4	2%
Liver problems	9	5%
Other	44	24%

B. Profile of Treatment Center Staff and Directors

The findings for this section are based on interviews of 142 staff across 23 treatment centers, and of 22 center directors (one center director was unavailable for interview).

1. Staff/Director Demographic Data.

1.1. Gender. The majority (70%) of the sample of treatment center staff were women as were 50 percent of the center directors.

1.2. Race/ethnicity. As shown in Table 22, the majority of staff were American Indian/Alaska Natives. The staff and directors were members of 43 tribes.

Table 22. Race/Ethnicity of Staff and Directors

Race/Ethnicity	Staff n=142	Directors n=22	Total n=164
American Indian	90 (63%)	16 (73%)	106 (65%)
Alaska Native	5 (4%)	0	5 (3%)
Hispanic	3 (2%)	0	3(2%)
Black, not Hispanic	3 (2)	0	3(2%)
Asian	0	0	0
White	40 (28%)	6 (27%)	46 (28%)
Other	1 (.5%)	0	1 (<1%)

1.3. Education and certification. Data were collected on academic degrees, special skills and experiences, and certifications of the staff and directors. The majority of the directors have a Bachelor's degree or higher and 40 percent of the staff have a Bachelor's degrees or higher (see Table 23).

Table 23. Educational background of staff and directors

Education Level	Staff n=142	Directors n=22	Total n=164
1. High school graduate/GED	54 (38%)	3 (14%)	57 (35%)
2. Associate degree/AA	21 (14%)	0	21 (13%)
3. Bachelor's degree/BS/BA	33 (23%)	8 (36%)	41 (25%)
4. Master's degree/MA/MBA	13 (9%)	3 (14%)	16 (10%)
5. Doctorate degree (Ph.D.)	6 (4%)	3 (14%)	10 (6%)
6. Other*	14 (10%)	5 (23%)	19 (11%)

*Includes directors who are enrolled in programs for MA or BS degrees, and staff who are enrolled in 2-year CD or nursing programs.

1.4. Recovery status. The majority of staff (63%) and directors (64%) reported being in recovery from the abuse of alcohol and/or other drugs. Over half of the staff in recovery indicated they had been in treatment.

1.5. Staff positions/skills/experience. Table 24 shows the various positions held by the 142 staff members in the sample. The sample represented over 25 different types of positions, with the majority being some level of counselor – primary/lead counselor, outpatient, inpatient, intake, aftercare, and counselors in training (CIT), behavioral technicians (BT), psychiatric technicians PT), and chemical dependency interns (CDI). The "other" category includes a variety of additional positions such as registered nurse, child development specialist, data center manager, staff psychologist, mental health specialist, and inquiry coordinator.

Table 24. Positions of staff in sample

Staff Positions	n	%
Program Coordinator/Supervisor	7	5%
Primary Counselor/Lead counselor	13	9%
Clinical Supervisor/BHT Supervisor	15	11%
Intake/Admissions Counselor	13	9%
Inpatient Counselor	12	5%
Outpatient Counselor	30	21%
CITs, PTs, BHTs, CDIs,	18	13%
Aftercare/Transitional Counselor	7	5%
Addictions Counselor	2	1%
FAS/FAE Coordinator	2	1%
Family & Child Specialist	2	1%
Other	21	15%

Most (85%) of the staff had some type of certification or license in such areas as A/SA treatment (54%), mental health (8%), and other areas including rehabilitation counselor, special education, teacher, nursing, child development, ordained minister (19%); 4 percent were licensed clinical social workers (LCSWs).

Many staff had specials skills or experience related to A/SA treatment such as counseling experience, personal experience in recovery, cultural/spiritual approaches to addiction treatment, knowledge of the impact of A/SA addiction, knowledge of domestic violence (see Table 25).

Table 25. Special skills/experience of staff

Area of Experience/Skills	n	%
A/SA Counseling	56	39%
Personal experience in recovery	46	32%
Cultural/spiritual approaches to addiction	36	25%
Addiction treatment	40	28%
Good people skills	28	20%
Knowledge of impact/sequelae of A/SA	27	19%
Education and training	15	11%
Domestic violence/abuse	14	10%
Other	21	15%

1.6. Participation in tribal activities and/or ceremonies. The majority of the staff participated in tribal activities and ceremonies (see Figure 2). For those staff members who participated in tribal activities, the most frequently mentioned activities were sweats, pow wows, ceremonies, and talking circles.

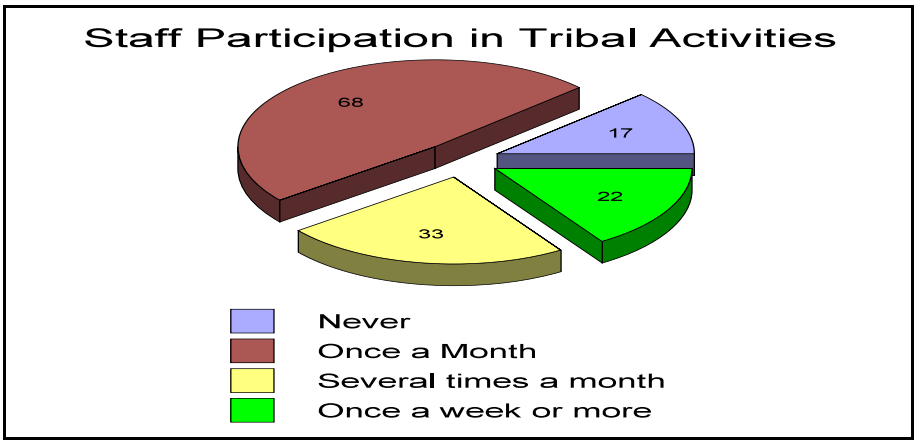

Figure 2. Staff participation in Tribal activities

1.7. Length of Service (LOS) at Treatment Centers.

Directors. Across the 22 study sites, the LOS of project directors varied from 1 month to 19 years, with 40 percent having served less than one year. The majority of the directors reported that they had worked in another position at their respective centers prior to becoming a director, frequently in a

position as counselor. A few moved to the position of supervisor prior to becoming director. Other positions previously held by directors included Intake Coordinator, Prevention Specialist, and Treatment Coordinator. Table 26 shows the range of LOS for directors.

Table 26. LOS for directors & staff

Length of Service	Directors		Staff	
	n	%	n	%
Less than one year	9	40%	34	24%
1 - 5 years	7	32%	77	54%
6 - 10 years	3	14%	22	16%
11-19 years	3	14%	9	6%

Staff. The LOS for staff ranged from 21 days to 17 years. As shown in Table 25, the majority of the staff sample has been at the treatment centers for 5 years or less, and one-quarter for less than one year. Directors reported that the positions that turnover most frequently are counselors in training (CITs), behavioral technicians, and support staff. It is clear that despite the stress and demands of the job, many staff members are very devoted to the clients.

C. Profile of the Treatment Centers

This section presents findings on the 23 treatment centers where site visits occurred.[16] The data are presented in four categories: descriptive information, center operations, treatment modalities, and services provided to clients. These findings are based on site visits to each center and from interviews conducted with the directors during the site visits. Table 26 represents conditions at the centers at the time of the site visits conducted during May 1998 through November 1999.

1. Descriptive Information.

The categories of descriptive information in Table 27 are 1) type of center (inpatient/residential [IP] or outpatient [OP]), 2) capacity, 3) typical duration of treatment, 4) number of staff including directors, 5) date when the center first accepted clients (start date), and 6) setting (reservation, town, urban). Table 27 begins on this page and is continued on the following two pages.

Table 27: Treatment center characteristics

Treatment Center	Center Type	Capacity	Program Duration	Number of Staff	Start Date	Setting*
St. Regis CDP Hogansburg, NY	IP	10 beds	8-10 weeks	14	June 1983	Reservation
	OP	35 slots	6 months	5		

[16]Site visits were conducted to 21 of 22 study sites plus visits to two centers that subsequently dropped out of the study.

Blackfeet CDP Browning, MT	IP	18 beds	28 days	36	Sept. 1984	Reservation
	OP	10 slots	n/a			
ITC of Omaha Omaha, NE	IP	5 beds	45 days	11	Feb. 1988	Urban
Lummi CARE Bellingham, WA	IOP	135 slots	24 months.	4	1971	Reservation
Indian Rehab. Inc. Guiding Star Lodge Phoenix, AZ	IP	20 beds+ children	60 days or until goals met	56	1976	Urban
	OP	60 slots				
Dena A Coy Anchorage, AK	IP	16 beds + children	6 months. average	18	June 1991	Urban
WCRP Fairbanks, AK	IP	12 beds + children	goals met	48	May 1994	Town
Eagle Lodge Denver, CO	IP	16 beds	Varies by Client	20	May 1972	Urban
	OP	15 slots				
Northern Winds Red Lake, MN	IP	6 beds	30 days	30	1994	Reservation
Puyallup TTC Tacoma, WA	IP	40 beds	28 days	33	June 1977	Urban
	OP	137 slots	<2 years.			
AIFHC Oakland, CA	IP	18 beds + children	until goals met	29	June 1971	Urban
Creek Nation Okmulgee, OK	OP	36 slots	5 weeks, 3 & 6 months	6	Sept. 1991	Town
Sonoma County Indian Health Santa Rosa, CA	OP	95 slots + child care	Individual	8	1983	Urban
Choctaw Nation Talihina, OK	IP	3	2 months.	7	1986	Town
	OP	24 beds				
Dakota Pride Agency Village, SD	IP	14	45 days	12	1978	Reservation
Eastern Band of Cherokee Cherokee, NC	IP	8 beds	28 days	7	1989	Reservation
	OP	100 slots	Individual			
Oneida Nation Oneida, WI	IP	24 beds	Individual	10	Jan. 1999	Reservation
	OP	150	Individual	10	Oct. 1992	

Rainbow Tx. Ctr. San Carlos, AZ	IP	21 beds	2 months	14	Feb. 1979	Reservation
	OP	15 slots	8 weeks			
Spotted Bull Tx. Poplar, MT	OP	15 slots	7 weeks	27	Jan. 1990	Reservation
Acoma AOD Acoma, NM	OP	90 slots	Individual	8	1969	Reservation
NARA NW Portland, OR	IP	52 beds + children	60-90 days	35	1970	Urban
	OP	150 slots				
Thunderbird Tx. Center, Seattle, WA	IP	86 beds	30 days	42	1976	Urban
	OP	34 slots	30-60 days			
NCI* Gallup, NM	IP	Open	16 days	28	1992	Town, near reservation
	OP	Open	0-5; 28days			

*NCI is a unique program. There are four distinct treatment components: 1) Hi'ina'ah Bits'os Society (HBS) is a 16 day traditional program, 2)DWI is a 28 day program for persons convicted of driving while intoxicated, 3) Protective Custody (PC) is provided to intoxicated persons who are involuntarily admitted at the discretion of local law enforcement officers for 1 to 5 days; social detox is a follow-up component of this service, and 4) Adult short term housing to help clients adjust to a sober lifestyle.

1.1. Types of treatment centers. As shown in Table 27, 13 of the centers are have both inpatient (IP) and outpatient (OP) components; however, only 4 of these centers enrolled both IP and OP clients in the study (St. Regis, Eagle Lodge, Oneida, and IRI/GSL). Nine centers enrolled clients from either their inpatient or outpatient components (5 IP and 4 OP). In summary, 4 sites enrolled clients from both IP/OP; IP only-11 centers; and OP only-8 centers. Ten of the centers are reservation based; 3 are located in a town, and 10 are located in urban areas.

Clients and staff reported costs and benefits associated with the location and type of center. For example, clients at some urban treatment centers had to walk past bars and drug dealers to get to the center. Some clients at residential centers said that living apart from people who abused them or who abused alcohol and other drugs facilitated recovery. These clients did not want to return to their home community where they would face the problems and challenges viewed as contributing to their addiction. Such clients and circumstances underscore the importance of having housing where women and their children can reside safe from abuse, and for Indian communities to maintain institutions and circumstances that facilitate recovery and sobriety of persons in A/SA treatment.

1.2. Center client capacity. The number of clients (inpatients and/or outpatients) the centers were able to serve at one time varied greatly. For example, one IP center reported 14 beds for its 45-day treatment cycle. An outpatient center reported 95 slots for clients, but frequently exceeds this number to accommodate clients who have no alternative provider. The capacity of the residential centers ranged from 5 to 52 beds and the capacity for OP centers ranged from 9 to 150 slots.

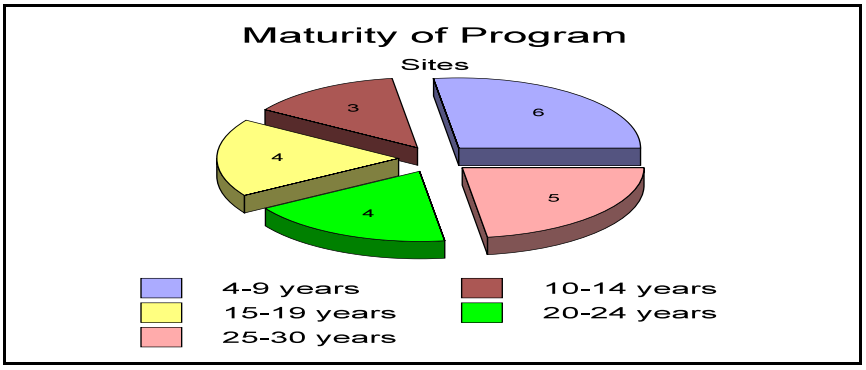

Figure 3. Maturity of Program

1.3. Time in operation. No treatment center in the study had been in operation for a period of less than 4 years. The majority (65%) had been in operation more than 15 years (see Figure 3); however, the reported time of operation can be misleading because many of the centers have experienced periodic reorganizations or expansions. Four of the centers experienced major reorganizations during the study. One center changed names during the course of the study; however, for purposes of continuity, the original name will be used for this report.

1.4. Treatment program duration. The duration of the treatment program at nine of the centers was flexible–determined by the client's needs and progress toward the treatment goals. At the other 13 centers, the duration of the treatment program ranged from 28 days to 6 months (see Table 28). Some of the treatment centers with shorter lengths of treatment either provide or refer clients to continuing care (aftercare, outpatient, halfway house). For example, one of the centers with a shorter (30 day) length of treatment has a halfway house for clients. This provides an opportunity for the client to get safe housing and to look for jobs after treatment. Other centers offer aftercare for up to one year or more. Others have programs where the client goes directly from inpatient to outpatient care.

Table 28. Length of treatment

Length of Treatment	n	%
30 days	5	23%
60 days	4	18%
45 days	2	9%
6 months	1	5%
Varies by client	1	5%
Individualized	3	14%
Until treatment goals met	6	26%

1.5. Number of women served in 1997. Center directors were asked to provide information on the number of women served in the 1997 calendar year, and the disposition (treatment completion, drop-out, referral to another facility/program) of the women clients after admission to treatment. Most of the centers did not maintain such data and 6 were unable to respond to the data request. Table 29 presents the data submitted by 17 centers. Because the study goal was to describe the overall program rather than an evaluation of specific treatment centers, the individual centers are identified only by number on this tabulations.

Based on lists provided by 17 centers, during the 1997calendar year, a total of 930 women were admitted for treatment; 285 clients completed treatment, 163 dropped out, 58 were discharged, and 95 were referred to other treatment centers. Five of the centers maintained waiting lists. The percentage of women clients admitted who completed treatment ranged from 19 to 86 percent.

Table 29. Women served by the treatment centers in 1997

Treatment Center	Admissions	Completers	Drop-outs	Discharged	Referred out	Percent AI/AN	Wait Listed
1	25	11	14	2	0	100%	0
	35	7	17	0	11	100%	0
2	98					99%	
3	47	38	7	1	1	100%	6
4	31	6	17		8	100%	0
5	200						
6	45	13	25	3	5	65%	4
7	54	22	17	14	0	89%	
8							
9	17	9	2	1	1	100%	1
10							
11							
12	38	17	17	17	11	100%	
13	57						
14	49	20	20	8	-	-	0
15	14	12	2	0	12	100%	10
16	22	14	2	6	2	100%	0
17	50						
18	25	9	10	6	0	100%	0
19	63	50	10	0	41	100%	30

20							
21							
22							
23	60	57	3	0	3	100%	10
TOTAL	930	285	163	58	95		61

*Blank fields indicate missing data

1.6. Service population. The majority of the treatment centers served both men and women clients. Three facilities were designed specifically to service women and children, (Dena A Coy and WCRP in Alaska, and AIFHC in Oakland, CA). Two other centers had a women's program and can accommodate children (Guiding Star Lodge and NARA, NW). Many directors expressed a desire for a separate women's program at their center. Most of the treatment centers had age restrictions–adult clients must be 18 years old, and the centers that served children require that the children not to be over the age of 5 years.

D. Staffing Issues

As shown in Table 27, the number of staff varied by the size, type, and location of the centers. The number of staff ranged from 3 at one center to 55 at another center. By design, the IP centers had more staff than did some of the OP centers.

Only 10 of the 22 directors had spreadsheets of staff information available at the time of the site visits. In come cases, the directors provided alternative forms of staffing information. Of the centers that had staff rosters, the information was often outdated–the lists did not match the actual situation at the site – often several of the positions were vacant when the site visit was conducted.

Center directors reported four types of employment with their centers–full time, part time, consultants, and volunteers. Within these categories, there were a variety of positions. The staff sample for this study included over 25 different positions, the majority of which were varying types of counselors.

1. Shortage of Trained Staff.

Some center directors said one of their key problems was maintenance of a full complement of trained staff; this problem seemed to be especially acute for centers in urban areas. In urban areas, low unemployment rates contributed to difficulties in recruiting qualified staff; on reservations with successful gaming enterprises, it was difficult for the centers to compete for staff with the relatively high-paying casinos.

2. Staff Recruitment.

Staff recruiting often operated under a variety of constraints. For example, centers operated by the IHS operate under federal hiring regulations, and tribally-operated centers often strive to hire tribal

members. On reservations with high unemployment, jobs are highly prized and sought after. Some staff claimed that the center was used by tribal administrators as a vehicle of political patronage to reward loyalty.

Staff learned about their positions from a variety of sources including advertisements in publications (e.g., tribal newspaper, bulletins, vacancy announcements), center staff, center clients and former clients as well as (see Table 30). The "other" category includes word of mouth (22), was a former client at the center (8), did internship at center (11), worked as volunteer or temporary employee and then moved up (8), job search (8), and from previous employer (4).

Table 30. How staff learned about position at treatment center

Source	n	%
Position description/advertisement	28	20%
From a center employee	33	23%
From a client/former client	8	6%
Tribe or tribal organization	8	6%
IHS	2	1%
Other	68	47%

3. Staff Turnover/Termination.

Staff turnover, including turnover of the center director, was both a cause of problems and a symptom of underlying problems. Staff turnover caused problems like burdening (at least temporarily) remaining staff with additional work, adding to the center's recruitment and training tasks, and dealing with issues of separation and loss often challenging to the therapeutic alliance and relationships among the clients, other staff, and the departing staff. Turnover seemed to be a symptom of underlying problems such as competition and disagreements among staff, poor or adversarial administration, and socio-political conflict–both center directors and staff said that changes in tribal administration could result in dramatic changes in center staff from the director to the most recently hired counselor. Changes in staffing sometimes left the center with little "institutional memory"–a problem often compounded by a lack of documented policies, procedures, and protocols. While not every center with high staff turnover was troubled, staff turnover seemed to be a symptom of "troubled programs."

Factors cited by staff for turnover included the stress associated with the work, conflict among the staff or between management and staff, political patronage and nepotism associated with changes in tribal administration or center governing boards, and issues associated with the use of alcohol and other drugs by the staff–loss of sobriety by staff in recovery.

Five centers had no turnover in the year prior to the site visit. At other centers, up to 28 percent of the staff left the center in the year prior to the site visit. Most (73%) of the center directors had fired

staff. Reasons for dismissal include inappropriate behavior with clients, misuse of center resources, and failure to show up for work. Other directors said they wanted to fire staff, but did not because of the difficulty in securing qualified replacements, and a desire to avoid confrontations with the staff person.

4. Staff Job Satisfaction.

While some centers had a problem with staff turnover, staff job satisfaction was high at most centers. Project staff were asked to rate the degree to which they liked their job using a 5-point bipolar scale with 1 being "like very much" and 5 being "dislike very much." The ratings were very positive with a mean score of 1.7 and 70 percent of the staff indicating that they like their job very much. Despite the stress associated with their jobs, no staff member endorsed either of the categories on the dislike pole of the scale (see Table 31).

Table 31. Staff ratings of job satisfaction

	Scale Score				
	Like very much				Dislike very much
	1	2	3	4	5
n	100	35	7	0	0
%	70%	25%	5%	0	0

Most of the staff (75%) said that their job had changed since they started working, and that they had been given additional responsibilities over time. Over 90 percent of the staff said that they had received special training in such areas as counseling, A/SA addiction, domestic violence, supervision, FAS/FAE, data management, and first aid/CPR.

Center directors were asked to describe the working relationship among their staff. The majority indicated that their staff get along really well, showed good teamwork, and some mentioned that there is a family-like working relationship. Other directors reported incidents of passive aggressive behavior and "turf battles" between mental health and substance abuse staffs and between administrative and treatment staffs.

5. Employee Assistance Programs (EAPs).

Most of the 22 centers had access to EAPs, generally through the tribe for tribal employees. The EAPs provide assistance to tribal employees who have behavioral, medical, or other problems. Frequently, a tribal EAP provides A/SA assessment and referral services. Tribal employees with health insurance may be referred for A/SA treatment to off-reservation programs, especially if the employee works at a treatment center.

Abuse of alcohol and other drugs by staff presents a special problem to the treatment centers, and the severity of the problem increases as a function of the seniority and rank of the substance-abusing

employee. It is relatively easy to refer staff with low levels of seniority and rank to the EAP or another A/SA treatment program; referrals of a treatment center director or other person of high rank or seniority, was reported to be very difficult.

6. Staff Training.

Most (65%) treatment centers provided training to clinical staff. Often, entry level staff were required to complete a specified level of training before working with clients. The nature of this training varied across the 22 treatment centers for which data were available. The training areas provided by the greatest number of programs included A/SA treatment, prevention, and physiology, relapse prevention, charting, and cultural and spiritual issues (see Table 32). Some centers provided the training on site with in-house staff and/or consultants; other centers referred new staff to outside training and education sources.

Table 32. Staff training provided for new hires (continued)

	Before Hire		After Hire		
Training Area	**n**	**(%)**	**n**	**(%)**	**CEUs**
A/SA Treatment	12	54%	17	77%	12
A/SA Prevention	8	36%	14	64%	10
A/SA Physiology	10	45%	14	64%	12
Dual diagnosis patients	3	14%	18	82%	10
Sex abuse treatment	3	14%	18	82%	9
Physical abuse treatment	3	14%	15	68%	7
Case finding	10	45%	16	73%	9
Charting	13	59%	17	77%	8
Relapse mgt/prevention	13	59%	17	77%	11
STD treatment/prevention	3	14%	16	73%	8
Dealing with violent clients	5	23%	4	18%	
Abnormal psychology	4	18%	12	54%	7
Cultural issues	12	54%	17	77%	6
Spiritual issues	11	50%	16	73%	6
First Aid/CPR	9	41%	18	82%	7
Family therapy	6	27%	15	68%	10
Residential care/treatment	8	36%	13	59%	7
Computer training	3	14%	16	73%	7

Table 32. (continued)					
Data management	3	14%	16	73%	8
Reporting	7	32%	18	82%	6
Other	4	18%	2	9%	4

After hire, continuing education was provided at the centers or was funded by the centers as needed to maintain an employee's certification or licensure.

7. Hours Worked/Week by Staff.

Most staff interviewed worked full-time (51%) or consistently more than full-time (43%); only 6 percent of the staff interviewed worked part-time. It is likely that the centers employ a higher percentage of part-time staff; however, such staff were less likely to be selected in the sample. At some centers, both the director and staff said that "staff burnout" was a problem because of the stressful nature of working with clients struggling to overcome addiction and because of the long hours worked by some staff.

E. Center Operations

This section describes the procedures for admitting and providing services to clients, development of treatment plans, counselor assignment, sources of referral, and treatment approach/philosophy of the centers.

1. Client Admission.

1.1. Eligibility criteria. Most of the treatment centers had similar criteria for eligibility for service–a potential client must be: 1) at least 18 years of age, 2) an Indian or Alaska Native, and 3) A/SA dependent (see Table 33). Some tribally-operated centers also restricted service to tribal members or gave preference to tribal members seeking treatment services. One center recruited clients from jail; completing treatment was part of the agreement worked out with the courts.

Table 33. Eligibility for service Criteria

Criteria	n	%	Criteria	n	%
18 years of age	7	32%	Pregnant	2	9%
Tribal member/AI/AN	8	36%	Must be female	4	18%
A/SA dependent	7	32%	Ambulatory	2	9%
Tribal preference	7	32%	Meet DSM-4 criteria for ASA/MH	4	18%
Free of mental health problems	4	18%	Be committed to treatment	3	14%
A/SA-free for 72 hours prior to admission	3	14%	Good physical health	2	9%
Referred from jail/courts/attorney	3	14%	Other (state, urban preference)	3	14%

1.2. Primary sources of referrals. The treatment centers received referrals from 2 to 17 sources. The sources most frequently identified by center directors were tribal courts (82%), child protective services (73%), other A/SA programs (73%), client families (73%)–see Table 34 below.

With the exception of two centers, there were several sources of referrals identified by each center. For example, four centers take referrals from 14 - 17 sources; 10 other centers take referrals from 5 - 10 sources. One center identified only 2 sources of referrals – tribal courts and CPS. This center is an inpatient program for women only.

Table 34. Sources of client referrals

Referral Source	n	%	Referral Source	n	%
Tribal court	18	82%	Urban program	11	50%
CPS	16	73%	Detox program	10	45%
A/SA treatment program	16	73%	Doctor/provider	9	41%
Family	15	68%	Other*	9	41%
Self	14	64%	Friends	8	36%
Social Services	13	59%	Employer	8	36%
Other tribes	13	59%	CHR	6	27%
Mental health worker	12	55%	NANACOA	3	14%
Outpatient clinic	12	55%	AA/NA	3	14%
*Other includes FAS coordinator, housing programs, attorney					

1.3. Pre-admission Screening. In all but two centers, potential clients are evaluated to determine if they meet the center eligibility criteria and that the center can meet their needs. The evaluation procedures are summarized in Table 35 below. The "other" category includes state preference, urban preference, and history of abuse.

Table 35. Pre-admission screening procedures

Procedures	n	%	Criteria	n	%
Determine eligibility	6	27%	Pregnant	2	9%
MH and A/SA assessment	8	36%	Must be female	4	18%
Through admissions committee	6	27%	Ambulatory	2	9%
Physical exam	4	18%	Meet state requirements	2	9%
Phone triage	2	9%	Determine safety of client & kids	1	4%
Determine level of commitment	2	9%	Look at previous Tx history	2	9%
Referred comes with assessment	2	9%	Other	6	27%

2. Client Evaluation and Treatment Planning.

With one exception, all centers conducted additional assessments as part of determining client needs and developing of a treatment plan. As part of the evaluations, the centers used diagnostic instruments including the Substance Abuse Subtle Screening Inventory (SASSI), Michigan Alcoholism Screening Test (MAST), Substance Use Disorders Diagnostic Schedule (SUDDS), Addiction Severity Index (ASI). All centers collected information on the "bio-psycho-social" factors associated with the client's abuse of alcohol and other drugs. Only two of the programs explicitly used the patient placement criteria (PPC-2) sponsored by the American Society of Addiction Medicine (ASAM).

2.1. Development of treatment plan. All but one of the 22 centers developed written treatment plans for clients. These plans are developed through the joint efforts of the primary counselor and client with input from other center staff, and address the client needs as revealed by the evaluation process. The way the treatment plan is used varies greatly across centers. At only two centers were the treatment plans regularly updated in accordance with client progress. At other centers, the planning process served the function of involving the client in her treatment, and the plan served as a point of reference for the client, her primary counselor, and other staff.

2.2. Counselor assignment. At most centers, primary counselors were assigned to clients based on three criteria: counselor gender (generally there was an effort to assign women counselors to women clients), caseload of the counselors, and matching counselor skills with client needs. All centers used a team approach to some degree, and one center assigned a client to a team rather than to an individual counselor.

3. Center Treatment Philosophy/Approach.

Center directors and staff were asked to describe the treatment philosophy/approach of their center. Some of the centers had a basic treatment philosophy, but all of them used multiple models or approaches to A/SA treatment. It was not uncommon to find variation in the description of the treatment philosophy or approaches across staff within the same center. For example every center director said that the center treatment included a spiritual/cultural component; however, only 38 percent of the staff interviewed said a spiritual/cultural component was included (see table 36). The key components of some of the most popular treatment philosophies/approaches are discussed in this section.

One treatment approach used by most centers involved the incorporation of "spiritual and cultural components" in the A/SA treatment. This approach stresses traditional tribal values of sobriety, responsibility to one's family, clan, and community as well as use of ceremonies, traditions, and spiritual activities such as purification ceremonies, sweat lodges, and song. The culturally-based 12-step approach, in some ways, represents a melding of the 12-step approach associated with Alcoholics Anonymous with the cultural component approach.

Another approach widely-used by the centers in the study involved a focus on womens' issues, with the goal of empowerment. This approach included understanding the client's abuse of alcohol in the context of 1) the expectations, demands, and roles played by women as daughters, sisters, spouses,

mothers, and grandmothers, 2) discrimination against and abuse of women, and 3) the role of solidarity and support of women by women in seeking recovery. The focus on womens' issues was used by each of the four centers that either served women clients exclusively or served cohorts of women clients.

The family approach stressed the role of the client's family in addiction and therapeutic processes. The addiction process is examined in terms of family history, modeling social learning, and co-dependence. The therapeutic process involves uncovering family relationships and issues that support addiction and seeks to eliminate them as well as developing family supports for sobriety.

The behavior change/empowerment approach stressed the application of learning and behavior modification principles and techniques to the extinction of drinking and drug use behaviors and to the development of alternative, competing prosocial behaviors. The factors and circumstances (i.e., stimuli) associated with craving and using drugs are identified as are positive and negative reinforcers, and the client is taught ways to control her environment and behavior by eliminating or moderating such stimuli. The behavior modification component is augmented with strategies designed to help the client emerge from the role of a powerless victim of alcohol, drugs, and other harmful aspects in her life to a role of a person able to control her cravings and other aspects of her life.

Table 36: Treatment approaches/philosophies of centers

Treatment Philosophy/Approach	Staff		Directors	
	n	%	n	%
Culturally-based 12-step program	26	19%	3	14%
Holistic/integrative	53	39%	3	14%
Focus on womens' issues	64	47%	4	18%
Behavioral change empowerment	44	32%	2	9%
Family approach	22	16%	5	23%
Spiritual/cultural component	52	38%	22	100%
Individualized Tx plan	37	27%	2	9%
Disease model	3	2%	3	14%
Other*	11	8%	6	27%

*Includes FAS/FAE prevention, 7 generation concept, harm reduction, and survival approaches.

F. Services Provided

The treatment centers provided clients with a wide range of therapy, education, supportive services, and cultural activities. There was considerable variation in the scope and level of integration of the services across the centers. For example, every center provided some degree of substance abuse

education to clients. At some centers, such education was almost incidental to the diagnosis and treatment activities. Other centers had a well-defined substance abuse education curriculum with explicit educational goals that were integrated with treatment plans and goals. This section of the report describes the services and activities provided.

1. Therapy and Therapeutic Services.

The centers provided a variety of therapeutic services (see Table 37). Every center provided individual and group substance abuse counseling designed to help clients understand the nature of their addiction and to help them achieve sobriety. Nearly all centers incorporated into their treatment program and support groups some form of the 12-step approach used by AA. In these support groups, clients are encouraged to admit and confront their addiction and addiction-related behaviors, and to share support and encouragement in their struggle to achieve and maintain sobriety. The frequency of service provision varies across centers. For example, individual therapy sessions ranged from "episodic" at one treatment center to 9-12 hours per week at another center. Similarly, the percent of clients receiving the service varied across centers. The services provided most frequently and to the greatest percent of clients were substance abuse counseling (individual and group), substance abuse education, 12-step approach, and support groups.

Table 37. Treatment services provided

Treatment/Service Provided	Number of Centers	Percent of Centers
1. Substance abuse counseling	16	73%
Individual	19	86%
Group	17	77%
2. 12-step approach	21	95%
3. Support groups	18	82%
4. Family therapy	14	64%
5. Spouse/partner counseling	17	77%
6. Tx. services for children	9	41%
7. Psychotherapy	8	36%
Individual	7	32%
Group	5	23%
8. Adjunct therapy (art, music, dance, drama, etc.)	14	64%
9. Tobacco cessation	10	45%
10. Trauma/abuse treatment	16	73%

1.1. Family therapy. At the time of the site visits, six centers did not provide family therapy. Two of the centers, however, did make referrals to mental health services for family members. Another center provided family therapy as part of continuing care after the client completed treatment. Provision of family therapy was especially difficult for residential centers that serve clients who reside far from the center. In such cases, it is often impractical for family members to travel to the treatment center. Also, even if the family members could travel to the treatment center, there may be little or no lodging available near the center. In such circumstances, where distance represents a critical barrier to healthcare, telemedicine might be employed to permit the client, center staff, and family members to communicate by videoconference or teleconference.

While the distance barrier was far less critical for outpatient centers, a lack of transportation was still a barrier to family therapy and other services. Public transportation is available in few communities in Indian country, and clients and their families often lacked reliable transportation–a problem often exacerbated by extreme weather conditions in the winter or summer.

1.2. Spouse/partner counseling. As a variation of family therapy, some centers provided spouse/partner counseling designed to help a spouse or partner support the client's sobriety (including by becoming and remaining sober too). This approach has been developed in response to reports that many clients achieve sobriety in treatment only to return to a home with a spouse/partner who remains addicted to alcohol or other drugs and who contributes to the client's relapse. This study partially confirms these reports by finding that 28 percent of the clients resided with a spouse/partner who abused alcohol or other drugs.

Approximately two-thirds of the treatment centers provided couples counseling to the clients during treatment. Most of these services are provided upon request and hinged on factors such as client safety and distance of the spouse/partner's residence from treatment center. As with the provision of family services, couples counseling was more available in outpatient centers. Critical issues addressed in the couples counseling include the abuse of alcohol and other drugs by the spouse/partner, subversion of the client's progress toward sobriety, and child custody and safety.

1.3. Accommodation of children. Research suggests that the desire to avoid separation from her children deters women from seeking or accepting residential A/SA treatment. If a mother is a single parent (52% of the clients were), if she lacks a stable living arrangement or home (25% of the clients did), if her spouse /partner abuses alcohol or other drugs (28% of the clients' spouses/partners did), she may be unable to arrange a safe and secure home for her children while she is in residential treatment. Center directors noted that some clients at residential centers would intentionally violate center rules with the goal of being discharged so that they could return home to see their children and family. In response to this problem, nine of the treatment centers developed the resources needed to accommodate and care for the dependent children (generally under the age of 5) of their women clients. Table 38 lists the sources used for child care when clients were in treatment. Six of the clients took their children to treatment with them.

Table 38. Sources of child care for clients in treatment

Sources	n	%
Grandmother	31	31%
Other family members	22	21%
Father	12	12%
Foster care	8	8%
Boyfriend/spouse	5	5%
CPS/Social services	6	6%
Friends	4	4%
Older children	3	3%
Other *	10	10%
*Includes shelter, day care, in school, any one she can find.		

1.4. Tobacco cessation. Despite the health risks of smoking and using smokeless tobacco products, the prevalence of smoking in Indian country, and the difficulty of breaking the addiction to tobacco, only 10 centers provided tobacco cessation therapy. Eight of these centers were residential facilities. At the centers that did not offer tobacco cessation treatment, there was a sense that adding tobacco cessation to the program would overwhelm the clients' efforts to achieve and maintain sobriety. Similarly, there was a sense that requiring the center staff to be "smoke-free" was perceived to be too difficult. Over 80 percent of the clients smoked at the time they entered treatment. Findings from the follow-up interviews show that the majority women who had attained sobriety still smoked.

1.5. Trauma/abuse treatment. Soon after admission to the center (generally within 2 weeks), the Client History DCI was completed based on client interviews. In these interviews, most of the clients admitted to being a victim of physical (88%), sex (54%), or emotional (75%) abuse. Center directors and staff stated that many women are "in denial" or reluctant to admit to having been abused until they have been in treatment for 2 weeks or more, and have developed trust in the center staff. After such trust has been developed, many women who deny having been abused in early interviews, later admit to having been abused. Thus, center staff estimate that the percentages of clients who have actually been abused are even higher than those reported in the History interviews.

Center directors said that most of the abused women suffer from post-traumatic stress disorder (PTSD), and can be characterized by:

- ❑ Difficulty in focusing on the task/activity at hand
- ❑ Difficulty in identifying and talking about feelings
- ❑ More withdrawn than other clients
- ❑ Harder to stabilize; they generally have more problems or more severe problems, as do their children
- ❑ Low self esteem
- ❑ Pattern of destructive relationships with men

- ❑ Prone to have violent episodes with their children; perpetuating family violence subjects kids to violence, and the kids become victims
- ❑ Have trouble dealing with authority figures
- ❑ More difficulty in recovery–it takes longer and requires more patience on the part of the treatment center staff
- ❑ Exhibiting inappropriate or incongruent behavior such as smiling when talking about a grief issue
- ❑ Easily angered and agitated, and
- ❑ Feeling at fault or responsible for having been abused.

It was clear that, at every center, the director and staff were aware that most of the women clients were victims of abuse and that such victims require special treatment. Many of the centers provide staff training pertaining to the needs of clients who are victims of abuse; however, it appeared that few of the programs had explicit treatment protocols for identifying and treating PTSD, and that the staff training was informal and episodic.

Center directors said that the prognosis for recovery for abused clients is worse than that of non-abused clients. The prognosis is related to the severity of the abuse and age at which abuse starts–the earlier the age and the more severe the abuse, and worse the prognosis. The length of abuse is another factor affecting the prognosis. The center directors said that abused women who abuse alcohol and other drugs are more likely to relapse, and that participation in a womens' support group generally facilitates recovery. The data on treatment completion supported the poor prognosis of abused clients–abused clients are more likely to drop out before completing treatment (see the Outcomes Section).

2. Support Services Provided to Clients in Treatment.

Center directors said that a lack of child care and transportation are major barriers preventing women clients from entering into and to completing treatment. To help clients overcome these barriers to treatment, 8 centers provided childcare services and 18 centers provided transportation services to their clients (see Table 39 which is continued on the following page).

Table 39. Support services provided to clients

Services Provided	n	%
Child care	8	36%
Transportation	18	82%
To/from residential center	8	36%
To/from outpatient center	10	45%
Meals	17	77%
Shelter/housing	17	77%
Clothing	9	41%

Table 39. (continued)		
Referrals to legal aid, medical, etc.	22	100%
Financial	5	23%
Disability assistance	8	36%
Other	5	23%

Other support services provided by the treatment centers included meals, assistance in securing shelter or housing, clothing, referrals to social welfare agencies and other service providers such as legal aid, health care providers, social services, etc.

In general, it seemed that the determination of client needs and the coordination of needed services, activities, and resources were major problems across all the centers in the study. There seemed to be little coordination within and between the treatment center, IHS, tribal agencies, and other programs such as welfare-to-work, vocational rehabilitation, schools, child welfare, and tribal courts. Almost all of these agencies, programs, or entities have overlapping but separate responsibilities. Paradoxically, many if not most of the centers, programs, agencies, and entities subscribe to a holistic approach to their own program or activity but fail to coordinate, in this case, services to clients in IHS-funded A/SA treatment programs.

Most staff at the treatment centers recognized that the lack of any critical resource or support can and does contribute to the relapse of a client who achieved sobriety. For example, a client who had learned about the nature and effects of abuse of alcohol and other drugs, gained self-insight, and achieved sobriety in treatment would be likely to relapse if she:

- ❑ Returns to reside with an abusive spouse/partner, or a partner who continues to abuse alcohol or other drugs
- ❑ Becomes homeless
- ❑ Fails to secure employment and exhausts TANF benefits
- ❑ Fails to participate in support groups and/or continuing outpatient care.

Nevertheless, few centers have developed systems that affect what happens to a client after discharge or participate in systems that ensure a client's needs are met after discharge.

3. Cultural Component of Treatment.

All treatment centers provided some level of cultural/spiritual activities/services as part of their treatment program. Some activities take place at the center and other activities may take place at other sites. Some of the most widely used activities included talking circles, use of a medicine wheel in counseling or support groups, and sweat lodges (see Table 40). This component was identified by center directors and staff as one of the most effective treatment components.

Table 40. Cultural/spiritual practices provided in treatment

Activity	At Center	Outside Center
Talking, story telling circles	16	7
Medicine wheel	14	2
Ceremonial dance	5	14
Pipe ceremonies	6	9
Sweats	11	9
Shaking tent	0	1
Other	12	3

Depending on location and other factors, some treatment centers served members of just one or a few tribes; other centers served members of many tribes. In many ways, it is easier for a center that served members from just one tribe to incorporate cultural components throughout their treatment program. Some of these centers drew heavily on the services of traditional healers, and used tribal ceremonies and practices in powerful ways. Centers serving clients from many different tribes had to ensure that the clients would be receptive to an activity that might be foreign to their tribe.

G. Staff Evaluation of the Treatment Center

Treatment center directors and staff were asked to identify the strengths and weaknesses of the centers, and to identify ways that treatment could be improved to help clients achieve and maintain sobriety. This section of the report presents the observations and judgements of the staff.

1. Ratings of Overall Effectiveness of the Center.

Using a 5-point bipolar scale, the staff rated the overall effectiveness of their center on helping the clients to achieve sobriety. While these ratings were generally positive, 29 percent of the staff rated the overall effectiveness as neutral and 9 percent gave ratings on the negative side of the scale (see Table 41).

Table 41. Staff ratings of overall effectiveness of the center

	Scale Score				
	Very Effective				Very Ineffective
	1	2	3	4	5
n	29	58	41	10	3
%	20%	41%	29%	7%	2%

Some staff members stated that achieving recovery is difficult because many AI/AN women have too many issues to deal with. Further, if clients return to a reservation or to a small community after treatment, maintaining recovery is made difficult due to the lack of resources and support.

2. Most Effective Treatment Components.

The treatment components most often judged by center directors to be effective in helping clients reach and maintain recovery were cultural/spiritual activities, individual A/SA counseling, and independent living skills training. Staff members identified additional approaches that enhance treatment for AI/AN women–use of women counselors, counselors who are Indian or Alaska Native, women's groups, family involvement, and use a non-threatening, incremental approach. Some staff members also stressed the importance of showing respect for the women clients.

3. Greatest Strengths of Treatment Centers.

While several strengths were cited by center directors, the quality of staff was cited far more than any other–17 of the 22 center directors said that the quality of the staff was one of the greatest strengths of the center (see Table 42). This positive view of the center staff is supported by 3-month client interviews–clients said that one-on-one counseling was one of the aspects of treatment that most contributed to their improvement. In addition, the clients expressed gratitude to the counselors for helping them start a new life or "helping them get their life back." Because the work at the treatment centers is often difficult and stressful, it seems likely that staff with high levels of commitment to the work are more likely to accept a job at and continue to work at a center. Not only are the staff valued by the center directors and clients, they have a high degree of job satisfaction.

Table 42. Greatest strengths of treatment centers

Strengths	Staff (n=142)		PDs (n=22)	
	n	%	n	%
Quality of staff (training, understanding, etc.)	62	44%	17	77%
Spiritual/cultural components	42	29%	6	27%
Family/child component	16	11%	-	-
Holistic approach	13	59%	-	-
Compassion/understanding for clients	59	41%	-	-
Length of treatment	2	1%	3	14%
Treatment approach	30	21%	7	32%
Knowledge of what good treatment is	-	-	4	18%
Indian counselors & role models	8	6%	5	23%
Other*	10	7%	6	27%

Includes easily accessible location, good reputation, stable point in the community.

The judgments of the center directors about the value of the staff were shared by the staff. The staff rated on a 5-point bipolar scale their own overall effectiveness in helping clients to achieve sobriety. These ratings were very positive with less than 1 percent on the negative side of the scale and 42 percent endorsing the most positive scale score (see Table 43).

Table 43. Staff ratings of overall effectiveness of the center

	Scale Score				
	Very Effective 1	2	3	4	Very 5 Ineffective
n	59	46	34	1	0
%	42%	32%	24%	1%	0%

Comments by clients in follow-up interviews underscore the high regard for treatment center staff. Staff are praised for their compassion for and understanding of the clients, and for their commitment to the client's well being and healing.

4. Factors that Limit Success of Treatment Centers.

There was a consensus among center directors concerning one factor that limits the success of the treatment center–funding. All 22 center directors said that additional funding was needed (see Table 44). Some other areas of need identified by center directors suggest ways that the additional funding might be spent. For example, funds could be used to develop or improve transitional housing, services for children of the client, hire additional staff, expand staff training, and increase the capacity to serve more clients.

Table 44. Factors limiting treatment center success

Limiting factor	Staff (n=142)		Directors (n=22)	
	n	%	n	%
More funding	36	25%	22	100%
Management/administrative conflicts	22	15%	3	14%
Halfway houses/transitional housing	6	4%	4	18%
Women only treatment component	10	7%	3	14%
Services for children	5	3%	4	18%
Additional staff	27	19%	4	18%
Training for staff	20	14%	5	23%
Need larger treatment facility	30	21%	4	18%
Lack of follow-up/aftercare	10	7%	-	-
Other	15	10%	6	27%

As they did for the treatment program and for themselves, center staff rated the role of management in helping clients achieve sobriety. While the majority (64%) of these ratings were positive, 11 percent judged management to be ineffective (see Table 45).

Table 45. Staff ratings of the overall effectiveness of management

	Scale Score				
	Very Effective 1	2	3	4	Very Ineffective 5
n	45	46	33	12	5
%	32%	32%	23%	8%	3%

The staff ratings of their own performance were significantly more positive than those of the overall treatment program and of the program management. These ratings suggest that some staff are critical of the management of the centers. This conclusion is supported by areas of concern cited by staff:

- Salary discrepancies between management staff and other staff
- Lack of communication between program components
- Need therapy for kids – not just babysitting
- Lack of sensitivity towards women's issues
- Requirement to hire local staff who are untrained, unmotivated, and don't stay with the job very long (in community-based centers)
- Lack of stability.

IV. Treatment Outcomes and Factors Affecting Outcomes

Treatment success can be viewed as progress in a series of steps, or goals including the admission that one has a problem in consuming alcohol or other drugs, deciding to seek treatment, starting treatment, making progress in treatment, moving to a less intense treatment environment (e.g., from a residential program to an outpatient program), reduction in harm associated with alcohol/substance abuse, achievement of sobriety, and improvement in many areas such as physical and mental health, getting, keeping and improving performance on a job, social relations with family, peers, co-workers, and others. This section addresses the outcomes experienced by the clients in the study and the factors that influenced these outcomes. The first outcome variable examined is completion of treatment.

A. Factors Influencing Treatment Completion

The treatment centers were able to complete the Treatment Summary DCI for 136 (74%) of the 184 women clients enrolled in the study. Table 46 shows that the majority (56%) of the 133[17] clients completed treatment and another 15 percent were still in treatment at the centers when the Treatment Summary DCI was completed. A small percentage (4%) of the clients were evaluated but did not enter into treatment. These clients completed the Intake and History DCIs and other diagnostic procedures used by the center and either declined to enter into treatment or the center staff decided that the center was not an appropriate placement for the client. Eight percent of the clients were admitted to the center but were transferred to another facility or program (e.g., to a center for pregnant women). Some clients (13%) ended or dropped out of treatment against medical advice (AMA) and a few (4%) were discharged or dismissed from the centers for a serious violation of center rules such as fighting, stealing, and attempting to sell, use, or distribute alcohol or other drugs.

Table 46: Client status on Treatment Summary DCI

Client Status	n	%
Assessment Only	5	4%
Still in treatment	20	15%
Completed treatment	74	56%
Transferred to other program	11	8%
Dropped out/AMA	17	13%
Discharged/dismissed	6	4%
Total	133	100%

[17]The item on "client status" was not completed for 3 of the 136 clients; therefore, the data on Completers and Drop-outs is based on 133 clients.

The data were analyzed to determine the factors associated with treatment completion. The analyses revealed significant associations between treatment completion and factors pertaining to the client, factors pertaining to the center/care provided, and other factors. However, before examining the results of the analyses, three aspects of the data and analyses should be noted: 1) differences between the clients in the original sample and the subset for whom treatment summary data were collected, 2) the effect of different times of enrollment in the study on treatment completion, and 3) the definitional nature of some of the associations.. Each of these three issues is discussed below

1. Clients Served by Inpatient/Residential vs. Outpatient Treatment Centers.

Because centers with residential/inpatient programs were more successful at enrolling patients in the study and in collecting study data, clients served by such programs are over-represented in the study Of the 136 clients for whom treatment summary data were available, the majority, (84%) were served by inpatient/residential programs, 12 percent were served by outpatient programs, and 3 percent were served by combination residential/outpatient programs (see Figure 4).

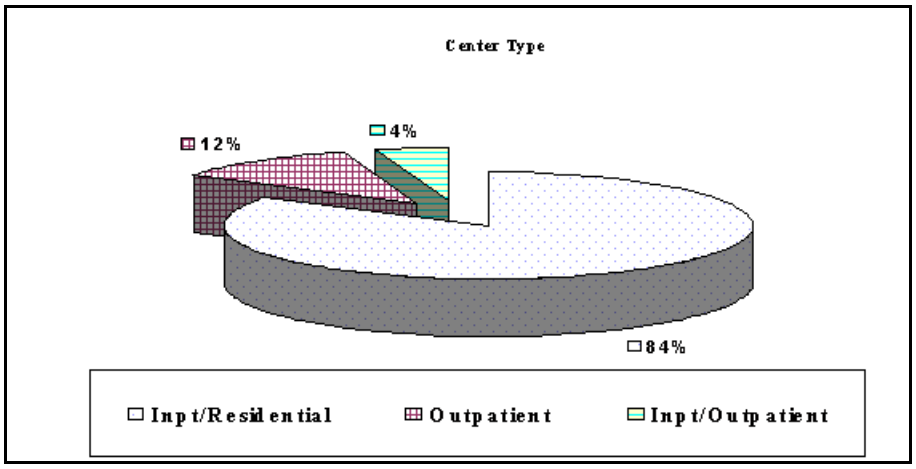

Figure 4. Clients served by treatment center type

The distribution of clients by type of center shown in Figure 4 does not represent the distribution in IHS-funded treatment programs; rather, it reflects the fact that residential/inpatient centers were far more effective in enrolling clients in the study and in collecting and reporting treatment summary data than were outpatient centers. Table 47 shows the distribution of clients by type of program for the planned sample of 509 clients and the 136 clients for whom treatment summary data were collected. Some of the differences between the treatment summary data and original sample data reflect different data sources and contexts. As part of the sample design process, IHS-funded treatment centers were classified based on information provided by the center directors and/or IHS Area A/SA program coordinators. The treatment summary data were provided by primary counselors and other center staff who may have classified their program in different ways from the center

directors and A/SA program coordinators. Despite the variation in definition of program type, it is clear that the percentage of clients served by inpatient/residential facilities is greater in the treatment summary "sample" (83.8%) than in the original planned sample (40.5%).

Table 47. Differences between original and treatment summary samples

Program Type	Planned Sample		Treatment Summary Data	
	n	%	n	%
Inpatient/Residential	206	40.5%	114	83.8%
Outpatient	186	36.5%	16	11.8%
Both	117	23.0%	6	4.4%
Total	509	100%	136	100%

2. Time in Treatment.

Clients were enrolled in the study starting in June 1998 and continuing through August 2000. Consequently, clients enrolled early in the study had more time to participate in and to complete treatment than those who were enrolled at a later time. While the differences were not statistically significant, clients still in treatment received less treatment than clients who had completed treatment (Completers); this trend was found for both inpatient/residential (measured by days of treatment) and outpatient centers (measured by contact hours). Some of these associations are direct determinants of treatment completion. For example, "Completers" tend to have more time in treatment than "Drop-outs." Similarly, a higher proportion of Drop-outs than Completers use AOD's during treatment–at some centers such use is grounds for discharge or referral to another program. However, some of the associations reported are not "definitional"--for example being a victim of abuse and treatment completion.

3. Client Attributes and Treatment Completion.

3.1. Treatment completion. All of the analyses in this section examine variables that were associated with a client's completion status–1) Completer, 2) Drop-out, 3) still in treatment, and 4) "other." It seems reasonable that the association between completion status and many variables is reflexive–that, on the one hand, the variable influences completion or dropping out of treatment and, conversely, dropping out or completing treatment influences the variable in question. For example, clients with a severe level of addiction may find it more difficult to complete treatment than clients with a mild level of addiction. Conversely, dropping out of treatment may be associated with becoming more severely addicted.

3.2. Client attributes. Eight client attributes or experiences were associated with completing treatment: 1) use of alcohol or other drugs during treatment, 2) self-identification of alcohol/substance abuse problem, 3) being a victim of sex and/or physical abuse, 4) expectations about the future, 5) having a new illness diagnosed at intake, 6) being approached to give support

and/or advice, 7) prognosis for future sobriety, and 8) client's expectations of contributions of spouse, family, and friends to her recovery. Each of the associations is described below.

Use of AOD during treatment. Use of alcohol and other drugs during treatment was rare among the clients in the study; 82 percent maintained sobriety during treatment, 7 percent did use alcohol or other drugs, and center staff were uncertain about the sobriety of 10 percent of the clients. The percentage of Drop-outs who "used" (9%) was significantly higher than the percentage of Completers who used (1%) (Chi Square=4.8, df=1, $p<.05$). This association reflects, in part the policy of centers to discharge or refer to another program clients who "use" during treatment.

Self Identification of A/SA. Clients were classified by center staff as 1) openly admitting to their alcohol/substance abuse problem (73%), 2) partially admitting the problem (18%), 3) "in denial" about the problem (4%), or 4) classification unknown (5%). Completers (92%) were more likely to openly admit the problem than were Drop-outs (30%) (Chi Square=4.3, df=1, $p<.05$).

Victim of Abuse. Of the clients with treatment summary data, the majority were victims of physical abuse (62%) and of sex abuse (53%); almost one half (45%) were victims of both. Higher percentages of Drop-outs than Completers were victims of abuse–64 percent of the completers compared to 74 percent of the Drop-outs had been physically abused (Chi square=6.1, df=2, $p<.05$); 51 percent of the Completers compared to 70 percent of the Drop-outs were victims of sex abuse (Chi square=5.6, df=1, $p<.05$).The relation between abuse and treatment completion is also reflected in differences between the "history sample" (the 174 clients for whom the Client History DCI was completed) and the "Treatment Summary" subsample (the 136 clients for whom the Treatment Summary DCI was completed). The percentages of the History sample who had suffered physical (88%) and sex (54%) abuse were higher than the percentages of the Treatment Summary subsample (62 percent victims of physical abuse and 53 percent sex abuse). These differences suggest that greater efforts are needed to identify and serve the needs of women clients who have been abused, especially those who are victims of physical abuse.

Expectations about the future. The Treatment Summary DCI contains 5 bipolar scales assessing the client's views and expectations about important aspects of her life 10 years in the future. Scores on the scales ranged from 1 ("Very Good") to 5 ("Very Poor"). Table 48 shows that Completers were judged to have more positive expectations than Drop-outs about their relationships with their children, their standing in the community, ability to maintain sobriety, and overall outlook on life.

Table 48. Client expectations about the future and treatment completion

Scale	Completers	Drop-Outs			
	Mean	Mean	F	df	p
Relationship with children	1.7	2.5	3.22	3,102	<.02
Standing in community	2.1	3.0	4.66	3,114	<.002
Ability to remain sober	1.9	2.9	5.65	3,117	<.001
Overall outlook on life	1.7	2.9	9.19	3,117	<.001

Discovery of undiagnosed illness. The discovery that the client had a previously undiagnosed illness was associated with treatment completion. During treatment, 16 clients (13%) were found to have a previously undiagnosed illness. The percentage of Drop-outs with diagnoses made during treatment (19%) was greater than that of Completers (5%) (Chi Square=4.3, df=1, p<.05).

Source of Support. The way others relate to the client was strongly associated with treatment completion. The Treatment Summary DCI contained an item that asked, "do people come to the client for support and/or advice?" The answer was "yes" for 73 percent of the Completers and only 16 percent of the Drop-outs (Chi Square= 8.5, df=1, p<.01). This suggests that clients may be able to identify others who are likely to complete treatment and achieve positive outcomes.

Prognostic Impression. Using a 5-point bipolar scale ranging from 1 (very low probability of abstinence) to 5 (very high probability of abstinence), center staff, generally the primary counselor, prepared a prognostic impression of the client's maintaining abstinence for 1 year. Drop-outs had a worse prognosis (mean=1.6) than either clients still in treatment (mean=3.7) or Completers (mean=3.6) (f=26.9, df=3,113, p<.001). This result provides support for the validity of the prognostic impression.

Support by family and others. Completers were judged to view both close friends and family to be more supportive of their recovery than did Drop-outs; however, the views of Completers and Drop-outs toward the support from spouses/partners were not significantly different (see Table 49).

Table 49. Ratings of client's views of the support of significant others toward recovery

Scale	Completer Mean	Drop-out Mean	F	df	p
Close friends will help in recovery	2.1	3.1	7.3	3,122	<.001
Family will help in recovery	1.9	3.0	7.6	3,123	<.001
Spouse/partner will help in recovery	3.0	3.4	1.3	3,99	ns
Scale score "1"="Agree strongly"	Scale score "4"= "Disagree strongly"				

4. Factors Pertaining to the Center/Care Provided and Treatment Completion.

The analyses examined the associations between the nature and amount of treatment received and treatment completion. By definition, Drop-outs received less treatment (i.e., fewer contact hours) than Completers. Nevertheless, only three of the treatment measures significantly discriminated between Completers and Drop-outs. Table 50 shows that Completers received more individual alcohol/substance abuse education, more of the 12-step approach, and more fitness/exercise activity than did Drop-outs.

Table 50. Treatment received and treatment completion.

Treatment Received	Completers Mean	Drop-outs Mean	F	df	p
Individual A/SA education	13.7	6.0	4.43	1,70	<.04
12-Step approach	35.3	20.4	5.31	1,85	<.03
Exercise/fitness activity	29.0	14.6	5.13	3,117	<.03

Some post-discharge referrals were associated with treatment completion. The types of referrals are presented in Table 51. Significantly more Completers than Drop-outs were referred to Alcoholics Anonymous, aftercare programs, and halfway houses; significantly more Drop-outs were referred to "other" programs such as domestic violence counseling, inpatient programs, and parenting classes (Chi Square values and associated probabilities are reported only for statistically significant associations.).

Table 51. Post-discharge referral and treatment completion.

Referred to	Completers n	Completers %	Drop-Outs n	Drop-Outs %	Chi Square	df	p
Alcoholics Anonymous	70	97.2%	11	50.0%	27.7	1	.001
Aftercare program	68	94.4%	6	27.3%	41.5	1	.001
Halfway house	16	22.2%	0	0%	4.4	1	.04
Other	12	16.7%	14	63.6%	16.3	1	.001

The comprehensiveness of the discharge plan was associated with treatment completion. The discharge plans were more thorough for Completers than Drop-outs for every component (see Table 52). These differences were significant for every component except mental health and physical health. Even the plans for Completers tended to lack mental health, physical health, and education components. These results suggest discharge planning procedures and training might be reviewed to improve client outcomes. Table 52 is continued on the following page.

Table 52. Comprehensiveness of the discharge plan and treatment completion.

Plan Component	Completers n	Completers %	Drop-Outs n	Drop-Outs %	Chi Square	df	p
Social support services	65	90.3%	6	27.3%	32.9	1	.001
Relapse prevention	65	90.3%	5	22.7%	37.0	1	.001
Continuing care	49	68.1%	7	31.8%	7.7	1	.005
Spiritual/cultural	48	66.7%	5	22.7%	11.5	1	.001

Table 52. continued

Mental health	26	36.1%	5	22.7%			
Medical/physical health	26	36.1%	3	13.6%			
Education	20	27.8%	1	4.5%	4.0	1	.05
Other	8	11.17%	8	36.4%	5.9	1	.02

Participation in the discharge plan by the client was associated with treatment completion–92 percent of Completers participated in discharge planning compared to 50 percent of the Drop-outs (Chi Square=17.3, df=1, p<.001).

5. Client Satisfaction and Treatment Completion.

Clients were asked several questions about their satisfaction with the services received at the treatment centers. At the 3-month follow-up, clients were asked to rate on bipolar scales: 1) their satisfaction with the care received at the center, 2) if they world recommend the program to their family or friends if they needed alcohol/substance abuse treatment, 3) if the treatment provided was sensitive to tribal traditions and ceremonies, and 4) the degree to which the program addressed issues of particular concern to AI/AN women. Table 53 shows that the majority of the clients (69%) endorsed the top two satisfaction categories.

Table 53. Client satisfaction with treatment received

Satisfaction with care received at the treatment center									
Not Satisfied 1		2		3		4		Very Satisfied 5	
n	%	n	%	n	%	n	%	n	%
1	1%	8	8%	15	14%	30	29%	42	40%

Similarly, the majority of the clients would recommend the program to their family and friends. Positive program recommendations were associated with program completion. The percentage of Completers who "definitely would" recommend the program (91%) was significantly greater than that for Drop-outs (53%; Chi Square=10.6, df=3). Also, client satisfaction was associated with depression. Depressed clients were less satisfied with the program (mean=4.3) than clients who were not depressed (mean=3.8; F=4.8, df=1,81, p<.04). It is not clear if depression tended to lower clients' level of satisfaction, or if the ratings reflect dissatisfaction with the care provided to depressed clients with A/SA problems, or both.

Client satisfaction with the program may have reflected clients' judgments that the programs were sensitive to tribal traditions and ceremonies as well as to issues of particular concern to AI/AN women. The majority of the clients (54%) judged the programs to be very sensitive to tribal

traditions, and a plurality (45%) of the clients judged the program to address AI/AN women's issues (see Table 54). Furthermore, treatment programs that were sensitive to tribal traditions tended to be sensitive to AI/AN women's issues and, conversely, programs that were insensitive to tribal traditions tended to be insensitive to AI/AN women's issues (Chi square=10.6, df=3, p<.02).

Table 54. Client ratings of program sensitivity to tribal traditions and AI/AN women's issues

Program sensitive to tribal traditions							
Not at All		A Little		Somewhat		Very Much	
n	%	n	%	n	%	n	%
7	7.2%	7	7%	23	22%	56	54%
Program addresses AI/AN women's issues							
Not at All		A Little		Somewhat		Very Much	
n	%	n	%	n	%	n	%
10	10%	8	8%	30	29%	47	45%

B. Outcome Data on Treatment Status

The clients were interviewed at 3-, 6-, and 12-months after beginning treatment. These interviews examined a wide range of client outcomes, circumstances, and activities. While a set of critical questions were asked at each follow-up period, to minimize the burden on the clients, some questions were asked at one or two of the follow-ups (see Attachment 5 for copies of the 3-, 6-, and 12-month DCIs).

Because of subject loss, comparisons among the 3-, 6-, and 12 month groups must be interpreted with care. Any differences observed may reflect the results of subject loss– differences between respondents who were not interviewed and those who were.

As expected, over time the percentage of clients still in treatment declined from 40 percent at 3-months to 16 percent at 12-months after initiating treatment (see Table 55). Correspondingly, a total of 62 percent of the clients had completed treatment at 12 months, and 22 percent had dropped out. Information on clients returning to treatment were collected only at 3-months. At that time, 14 percent had returned to treatment.

Table 55. Treatment activities and status at 3-, 6-, and 12-months

Activity/Status	Follow-up					
	3-Month (n=104)		6-Month (n=84)		12-Month (n=57)	
	n	%	n	%	n	%
Still in treatment	42	40%	20	24%	9	16%
Completed treatment	17	16%	15	18%*	16	28%*
Returned to treatment	15	14%	n/a	n/a	n/a	n/a
Participated in aftercare	40	38%	47	56%	36	63%
Participated in support group	87	84%	57	68%	n/a	n/a

* The percentage of the group completing treatment over the "last 6 months" is not a cumulative percent.
n/a–data not collected in the follow-up period.

Information about participation in aftercare was collected at 3-, 6-, and 12-months. Aftercare was often, but not always, provided at a facility different from the one where the client received initial treatment. Generally, the aftercare provided was less intense than the care provided by the original facility. For example, the initial care might be provided by a residential facility while the aftercare might be provided by an outpatient program. As the number of clients completing treatment increased, so did the percentage participating in aftercare –38 percent at 3 months, 56 percent at 6 months, and 63 percent at 12 months.[18] Clients indicated that the parts of aftercare that were most helpful in recovery were 1) womens' groups where they heard other women talk about similar life experiences and challenges, and 2) one-on-one counseling. This applied to the 3-month, 6-month, and 12-month follow-up data. Those clients who didn't go to aftercare indicated that the major reasons for not going were lack of child care and/or transportation, or conflict in schedule. Many clients did not live in close proximity to aftercare services.

Information about participation in support groups (e.g., AA) was collected at 3- and 6-months. The majority of clients participated in support groups; however, this percentage declined from 84 percent at 3-months to 68 percent at 6-months.

C. Sobriety-Reduction in Use of Alcohol and Other Drugs

At each of the three follow-up periods, clients were asked about the frequency and amount of alcohol and other drugs used. There were 3 sources for this information: one was an open-ended item asking about the overall client status; another was an item asking if the client used alcohol and/or other drugs in the specified periods, and the third was a list to identify the types, frequency, and amounts of drugs used during the 3, 6, and 12-month periods since entering treatment. The rates of alcohol and other drug use given by the clients in the open-ended item were higher (3-month - 16%; 6-month

[18] The percentages reported are of clients who were no longer in treatment.

- 32%; and 12-month-34%) than those rates provided in the chart or the yes/no item on use of drugs. As shown in Table 56, alcohol, marijuana, cocaine, and tobacco were the primary substances used. When compared with the A/SA use at the beginning of treatment (alcohol - 97%, marijuana - 78%, cocaine - 58%, and tobacco - 80%, there has been a significant decrease in use of AODs.) The use of alcohol declined from 97 percent to 13 percent. Marijuana declined from 78 percent to 9 percent, cocaine used declined from 55 percent to 7 percent; and tobacco use declined from 80 percent to 33 percent 12 months after treatment started.

Table 56. Use of alcohol and other drugs at 3-, 6-, and 12-months

Drug	Follow-up					
	3-Month (n=104)		6-Month (n=84)		12-Month (n=57)	
	n	%	n	%	n	%
ANY DRUG	16	16%	27	32%	19	34%
Alcohol (beer, wine, liquor)	15	15%	16	19%	13	23%
Marijuana	5	5%	4	5%	5	9%
Cocaine	4	4%	6	7%	4	7%
Stimulants	3	3%	2	2%	1	2%
Tobacco	45	44%	24	28%	19	33%

D. Other Treatment Outcomes

1. Relationship with Dependent Children and Homelessness.

At each of the three follow-up periods, clients were asked if they regained custody of their children, if they had been unable to take care of their children, and if they had been homeless for some period of time. During the History interview completed at the beginning of treatment, 39 percent of clients reported that they had lost custody of their children in the 12 month period prior to entering treatment. Table 57 shows that between 18-20 percent of the clients regained custody of their children at each follow-up period and that similar, generally smaller, percentages had been unable to care for their children. Homelessness was a problem experienced by over 10 percent of the clients at each reporting period, and homelessness was a factor for some clients who were unable to care for their children. Loss of custody or the threat of the loss of custody was an important factor in many clients entering treatment. Despite significant progress toward sobriety, many clients continued to face problems in being able to care for their children.

Table 57. Relationships of clients with their children at 3-, 6-, and 12-months

Outcome	Follow-up					
	3-Month (n=104)		6-Month (n=84)		12-Month (n=57)	
	n	%	n	%	n	%
Regained custody	20	19%	16	20%	2	18%
Unable to care for	18	17%	9	11%	11	19%
Homeless	13	12%	11	13%	7	12%

2. Education/Training and Employment.

At each of the follow-up periods, the clients were asked if they had entered school/training, if they had started a new job, and, if so, if the work was full-time or part-time. Table 58 shows that about one-fourth of the clients entered school and that an increasing percentage of the clients started to work at a new job at each follow-up period. These achievements are remarkable given the high unemployment rates and the scarcity of jobs, transportation, and child care in Indian Country.[19]

Table 58. Clients starting education/training or entering workforce at 3-, 6-, and 12-months

Activity/Status	Follow-up					
	3-Month (n=104)		6-Month (n=84)		12-Month (n=57)	
	n	%	n	%	n	%
Entered school/training	25	24%	20	24%	14	25%
Started a new job	30	29%	28	33%	24	42%
Worked full-time	15	14%	31	37%	26	46%
Worked part-time	11	10%	21	25%	11	19%

3. Arrests, Driving While Intoxicated (DWI), and Accidents.

At each follow-up period, clients were asked if they had been arrested for a crime, drove a motor vehicle while drunk or high, or were involved in a motor vehicle crash. Table 59 shows that fewer than 10 percent of the clients operated a motor vehicle while intoxicated, were involved in a motor vehicle accident, or were arrested for a crime.

[19]Hillabrant, W. and Rhoades, M., *Learning from Tribal Experience: The Evaluation of the Tribal Welfare-to-Work Grants Program*, December 2000.

Table 59. Arrest, DWI, and motor vehicle accidents at 3-, 6-, and 12-months

Activity/Event	Follow-up					
	3-Month (n=104)		6-Month (n=84)		12-Month (n=57)	
	n	%	n	%	n	%
Arrest for crime	7	7%	8	10%	4	7%
DWI	8	8%	4	5%	3	5%
Motor vehicle crash	1	1%	3	4%	1	2%

4. Experience of Physical or Sex abuse.

Most of the clients in the study had been abused before entering treatment. Some clients were being abused after initiating treatment. The most common perpetrator of the abuse was the woman's spouse or partner. Given the strong relationship between being a victim of abuse and abusing alcohol and other drugs found for the women in this study, there is an ominous possibility that abuse contributed to the inability to contact some of the clients in the follow-up periods.

At the 3- and 6- month follow-up periods, clients were asked if they had been abused in the last 3 or 6 months. Table 60 shows that 5 to 7 percent of the clients were physically abused and that physical abuse was almost three times more frequent than sex abuse. Some of the reports of abuse at the 6-month interviews were from the same victims who reported being abused at 3 months. In 13 of the 15 incidents of abuse, the client's spouse/boyfriend/partner was the perpetrator; family members were the perpetrators of the 2 incidents of sex abuse reported in the 3-month interview.

Table 60. Client physical or sex abuse at 3- and 6-months

Type of Abuse	Follow-up			
	3-Month (n=104)		6-Month (n=84)	
	n	%	n	%
Physical abuse	5	5%	6	7%
Sex abuse	2	2%	2	2%

5. Physical and Mental Health.

Clients were asked several about their physical and mental health at each of the follow-up periods. Questions about physical health included ratings of physical health on a 5-point bipolar scale (all three follow-up periods), utilization of native healers (6-month interviews), and utilization of emergency care, inpatient, and outpatient services (6- and 12-month interviews).

5.1. Physical health. Table 61 shows the distribution of the 5-point ratings of physical health over the three follow-up periods. Over time, clients' ratings of their physical health did not show

significant change. Combining the percentages of the two most positive rating categories shows that between 46 and 48 percent of the clients said that their physical health was good over the 12-month follow-up. Combining the percentages of the two least positive rating categories shows that between 9 and 15 percent of the clients said that their physical health was poor over the 12 months.

Table 61. Client physical health ratings at 3-, 6-, and 12-months

Interview Period		Rating of Physical Health				
		Excellent 1	2	3	4	5 Poor
3-Month (n=104)	n	13	35	34	12	3
	%	12%	34%	33%	12%	3%
6-Month (n=84)	n	15	25	25	11	4
	%	18%	30%	30%	13%	5%
12-Month (n=57)	n	4	23	22	3	2
	%	7%	40%	39%	5%	4%

Ratings of physical health were associated with a client's treatment status ($F=4.0$, $df=2,80$, $p<.03$). Clients who dropped out of treatment rated their physical health as worse (mean=3.1) than clients who were still in treatment (mean=2.3).

Utilization of health care resources. As shown in Table 62, there were decreases in the number of client visits to emergency rooms and to a doctor/clinic from the 6-month to the 12-month interviews. There was a small increase in the number of days spent in a hospital during the same time period. Information on health care utilization during the 12 months prior to admission for treatment was collected from 184 clients during the intake process (see Tables 20 and 63).

Table 62. Utilization of health care resources at 3-, 6-, and 12-months

Service Used	Follow-up					
	Intake (n=184)		6-Month (n=84)		12-Month (n=57)	
	n*	P.C.	n	P.C.	n	P.C.
Visits to emergency room	118	.6	60	.7	37	.6
Visits to doctor/clinic	445	2.4	488	5.8	272	4.8
Days hospitalized	524	2.8	87	1.0	80	1.4

*Adjusted for 6-month period prior to client entering treatment.
P.C. refers to **p**er **c**lient visit or days hospitalized

These data were adjusted for differences in the time assessed (12 months and 6 months) and the number of clients providing the data in order to compare health care utilization before and after admission to treatment. Clients had more visits to the emergency room and more visits to a

physician/clinic in the first 6 months after entering treatment. These increases reflect a greater openness to basic medical treatment by clients after entering into A/SA treatment. On the other hand, the clients had fewer days hospitalized after entering treatment– perhaps reflecting that primary care interventions reported decreased the need for hospitalizations.

5.2. Mental Health. At the 3- and 6-month follow-ups, clients were asked a series of questions pertaining to depression. In addition, information solicited about health care utilization collected at 6- and 12-month follow-ups included treatment for emotional/psychiatric problems. At the 3- month follow up, 20 percent of the clients said they had been depressed for a period of 2 weeks or longer. At the 6-month follow-up the percentage of clients reporting depression almost tripled to 57 percent. This dramatic increase may reflect an increased ability to experience, recognize, and/or admit depression that had been muted or denied while abusing alcohol or other drugs. Alternatively, leaving the protected and supportive environment of the treatment center may contribute to client's depression

Utilization of traditional healers and practices. In the 6-month interviews, clients were asked about their use of traditional well-being and healing practices including the use of talking circles, the medicine wheel, services of a Medicine Man or Woman, traditional healer, and sweat lodges. Table 63 shows that the talking circle and sweat lodge were the traditional approaches most often used and were judged to be the most useful approaches by the clients. A similar pattern was true for use of traditional healers and practices at the 3-month and 12-month interviews. With the 3-month interview, clients identified pow-wows as helpful with recovery.

Table 63. Utilization of traditional medicine and approaches to well-being

Provider/ Activity		Frequency				Helpfulness		
		Never	Once/ Twice	2-3 Times/ Month	Weekly or more	Little Help	Helpful	Very Helpful
Talking Circle	n	6	4	5	11	1	10	8
	%	7%	5%	6%	12%	1%	12%	10%
Medicine Wheel	n	9	3	2	4	4	3	2
	%	11%	4%	2%	5%	5%	4%	2%
Medicine Man/Woman	n	10	5	2	0	0	5	1
	%	12%	6%	2%	0%	0%	6%	1%
Traditional Healer	n	8	3	2	2	0	2	4
	%	10%	4%	2%	2%	0%	2%	5%
Sweat Lodge	n	9	9	7	1	1	9	7
	%	11%	11%	8%	1%	1%	11%	8%

Life Stressors. When clients completed the History interview at the beginning of treatment, they were asked a series of questions regarding life events/stressors that may have contributed to their

A/SA and need for treatment. During the 3-, 6-, and 12-month follow-up interviews, the clients were asked the similar series of questions. At each point, clients identified multiple stressors in their lives. Table 64 shows the comparisons across the three follow-up points for these data. At each of the follow-up periods an increasing percentage of the clients reported spending quality time with their children, and at least 68 percent reported making new friends.

Table 64. Client life events/stressors at 3-, 6-, and 12-month follow-up interviews

Life events/stressors	Follow-up					
	3-Month (n=104)		6-Month (n=84)		12-Month (n=57)	
	n	%	n	%	n	%
Regained custody of children	20	19%	16	19%	10	18%
Spent quality time with children	69	66%	59	70%	42	74%
Entered school/training	25	24%	20	24%	14	25%
Started a new job	30	29%	28	33%	24	42%
Started a new relationship with a new partner	13	12%	12	14%	11	19%
Found a new place to live	32	31%	37	44%	21	37%
Made new friends	78	75%	59	70%	39	68%
Death of a close friend/relative	19	18%	27	32%	18	32%
Loss of old friends	61	59%	45	53%	25	44%
Ended a relationship with a partner	28	27%	19	23%	10	18%
Miscarriage/abortion	5	5%	2	2%	4	7%
Other	15	14%	20	24%	12	21%

Feelings/emotions. Clients reported that one of the difficult issues to deal with in recovery was emotions-- anger and stress were the most commonly reported feelings. Boredom and loneliness were also frequently reported. During the follow-up periods of 3-, 6-, and 12-months after entering treatment, there was a trend of fewer clients reporting these four emotions (see Table 65). The clients who relapsed by the 12-month interval indicated that boredom, loneliness, anger, and depression contributed to their relapse.

Table 65. Emotions/feelings experienced by clients at 3-, 6-, and 12-months

Emotions/feelings	Follow-up					
	3-Month (n=104)		6-Month (n=84)		12-Month (n=57)	
	n	%	n	%	n	%
Being bored	55	53%	41	49%	24	42%
Being stressed	75	72%	62	74%	39	68%
Being lonely	60	58%	50	59%	27	47%
Being angry or frustrated	76	73%	58	69%	37	65%
Being depressed/anxious	55	53%	52	62%	25	44%
Being around others who drink or use other drugs	43	41%	40	48%	28	49%
Craving alcohol	27	26%	23	27%	16	28%
Craving other drugs	27	26%	20	24%	12	21%
Other	13	12%	20	24%	8	14%

E. Recovery

In the beginning of treatment, clients were asked what recovery meant to them, what would help them most in recovery, and what systems they had in place to help them in recovery. A similar set of questions were asked again at the 6- and 12-month follow-up interviews. Comparisons of the perspectives at different points in time are discussed below.

1. What Recovery Means to Client.

During the History interview, the majority of clients said that recovery means not using alcohol or drugs (58%), getting better for herself and her family (26%), healing and getting in touch with herself (19%), and changing attitude/outlook on life (10%). Table 66 summarizes the responses to what recovery means at the different points in data collection.

Table 66. What recovery means to client (continued)

Meaning of Recovery	Follow-up					
	Tx. Summary (n=136)		6-Month (n=84)		12-Month (n=57)	
	n	%	n	%	n	%
Not using AOD; sober/clean	50	37%	34	44%	26	45%
Getting better for self & family	25	18%	n/a	n/a	3	5%

Table 66. Continued

Having a better life/starting over	18	13%	31	37%	12	21%
Taking care of self	4	3%	6	8%	3	5%
Changing attitude/outlook on life	n/a	n/a	7	9%	25	44%
Getting control of life back	n/a	n/a	9	11%	n/a	n/a
Forgiving self for past mistakes	n/a	n/a	n/a	n/a	4	7%
Freedom	6	4%	n/a	n/a	n/a	n/a

2. Relapse Triggers.

The counselors who completed the Treatment Summary DCIs for the clients identified the primary relapse triggers for clients. They include:

- ❒ Friends/peers who use AODs
- ❒ Family pressures and problems
- ❒ Stress
- ❒ Visiting old places where client used AODs with friends/peers
- ❒ Isolation/loneliness
- ❒ Anger /frustration
- ❒ Relationship problems
- ❒ Boredom
- ❒ Untreated mental health issues.

Clients consistently identified being around old friends/family who use as the most difficult challenge in maintaining sobriety. Their approach to dealing with this problem was to avoid those friends and family members to the degree possible. Other frequently reported difficulties in reaching and maintain sobriety were unresolved emotions (anger, boredom, etc.), relationship problems, family problems and pressure.

3. Systems in Place/Approaches for Dealing with Problems.

Clients reported family, AA meetings, counselors, transportation, and child care as the most effective resources in helping them maintain recovery. For those clients who reached and maintained **sobriety** through the 12-month period, the following factors were identified as contributing to their recovery.

- ❒ Feeling better about herself (100%)
- ❒ Staying away from others who drink or use drugs (97%)
- ❒ Efforts made in reaching and maintaining sobriety (97%)
- ❒ Thinking about her children (95%)
- ❒ Better situation now at job/school/home (72%)
- ❒ Using traditional tribal methods/social support systems (62%)
- ❒ Support or spouse or parent (67%).

Clients identified the following problems as factors in their **relapse** during the 12-month period.

- ❒ Stress from family problems (100%)
- ❒ Boredom, loneliness, anger, or depression (95%)
- ❒ Craving alcohol or drugs (90%)
- ❒ Relationship problems (65%)
- ❒ Financial problems (65%).

V. Conclusions and Recommendations

This study describes representative samples of IHS-supported A/SA treatment centers and AI/AN women served by these centers from June 1998 through August 2000, and the outcomes experienced by these clients.

A. AI /AN Women Clients Served

Most of the AI/AN women in this study have experienced severe, even traumatic circumstances and conditions that contributed to their abuse of alcohol and other drugs and that represent barriers to their achievement and maintenance of sobriety. Most of the women were victims of physical, emotional, and/or sex abuse which began before their use of alcohol and other drugs. They grew up in homes where one or both of their parents abused alcohol and other drugs. Most of the clients were poor, unemployed, and receiving some type of public assistance before entering into treatment. They had long-standing substance abuse problems and had been in treatment before the encounter that led to their participation in the study. Most were poly-drug users–abusing alcohol, marijuana, tobacco, and/or cocaine.

Most of the clients had children and were single parents. Many had lost custody of one or more of their children because of their substance abuse, and were referred for treatment by tribal or other courts as a result of driving while intoxicated or neglecting their children. Most had been arrested in the 12 months prior to entering treatment.

1. Treatment Completion.

The majority (62%) of the clients in the study completed treatment. The most common reasons for failure to complete treatment included inability to tolerate separation from their children, feeling compelled to deal with family problems, violation of treatment center rules (resulting in expulsion from the center), and having a previously unknown illness diagnosed at intake–often resulting in leaving the center for treatment of the newly discovered illness.

2. Sobriety-Reduction in Alcohol and Drug Use.

On entering into treatment, 97 percent of the clients used alcohol, 78 percent used marijuana, 54 percent used cocaine, and 80 percent used tobacco. Follow-up data collected at 3-, 6-, and 12-months after intake show a decline in use of alcohol and other drugs:

- ❒ Alcohol: from 97 percent to 34 percent
- ❒ Marijuana: from 78 percent to 9 percent
- ❒ Cocaine: from 54 percent to 7 percent
- ❒ Tobacco: from 80 percent to 33 percent.

The clients reported that one-on-one counseling, women's groups (sharing experiences and lessons learned), and cultural/spiritual activities were the most effective treatment components. At the 12-month follow-up, the clients identified five factors that were most helpful in the road to recovery:

- ❒ Feeling worthy of respect and developing self-respect
- ❒ Staying away from others who drink and/or use drugs

- ❒ Making the commitment to staying clean/sober
- ❒ Thinking about the welfare of their children
- ❒ Improvement in their life at home, work, or school.

Clients who relapsed said that the most important relapse triggers included problems with family or other relationships, negative mood states (e.g., boredom, loneliness, anger, depression), financial problems, and/or craving alcohol or drugs.

B. Treatment Centers

The treatment centers in the sample varied in terms of size, location, capacity, services, and focus. One center served incarcerated women, another served hundreds of homeless AI/AN men and women in an urban reservation border town. Some centers provided child care services and treatment for the children of clients, making it possible for the women clients to receive residential treatment and be with their children. Some centers are located on reservations and others are located in urban areas.

1. Treatment Center Staff.

The majority of the center directors (73%) and staff (67%) were AI/ANs, and most (64%) were in recovery. The majority of the staff (85%) were certified or licensed in areas related to A/SA, and the majority of the directors and 40 percent of the staff have a Bachelor's Degree or higher. Turnover was a major staffing problem for the centers with 40 percent of the directors and 24 percent of the staff having served less than 1 year.

2. Treatment Services Provided.

All centers in the sample included cultural components in their treatment services, drawing on tribal traditions, ceremonies, and healing practices. Almost all (95%) of the centers incorporated aspects of the 12-step approach developed by AA, and most of the centers provide individual (86%) and group (77%) substance abuse counseling. Other services and care provided include support groups (82%), family therapy (64%), spouse/partner counseling (77%), trauma/abuse treatment (73%), and independent living skills training (77%). The majority of the centers (55%) did not provide tobacco cessation treatment.

Substance abuse education and fitness/exercise training were significantly associated with treatment completion. Clients, center staff, and center directors had different judgments concerning the most effective treatment components. Clients and center directors included cultural/spiritual activities among the most effective components. Clients and staff included women's groups, and center directors and staff included individual A/SA counseling in the most effective components.

3. Need to Expand and Enhance Treatment and Services Provided.

To better meet the needs of their AI/AN women clients, centers need additional resources to enhance and expand the A/SA treatment and support services provided. The needed treatment includes therapy to support smoking cessation and the use of other tobacco products, improved diagnosis and

treatment of post-traumatic stress and other conditions associated with physical, emotional, and sex abuse. The needed support services include enhanced continuing care after discharge from residential centers, safe transitional housing, child care while the mother is in treatment, and A/SA prevention services for children of persons in A/SA treatment. The IHS, working with other federal agencies (e.g., NIDA, NIAAA) should help IHS funded A/SA treatment centers to develop the capabilities and capacities needed for the provision of the needed treatments and services.

While the centers recognize that most of their women clients are victims of abuse, many lack diagnostic procedures for determining the nature and degree of associated trauma as well as formal, systematic protocols for treating the abuse. The IHS, in conjunction with other federal agencies should consider supporting the development of culturally appropriate procedures and protocols, and the training needed to use such procedures and protocols.

Every center should include tobacco cessation treatment with other addiction treatment services. Clients should be encouraged to identify smoking and the use of smokeless tobacco as serious threats to their health, and the centers should work toward providing a smoke-free environment.

This study, and others, indicates that substance abuse can be seen as a family problem. One or both of the parents and the siblings of most of the clients abused alcohol and other drugs. Few of the centers in the study had systematic approaches for providing A/SA treatment and prevention services to the children of their clients. Such interventions with the families of clients face many challenges and barriers including protection of the privacy and other rights, community values and expectations, and child protection. Problems and concerns associated with family-oriented A/SA prevention and treatment are compounded by the issue of child abuse. Almost all of the AI/AN women in this study were victims of abuse, much of the abuse began when they were children. Effectively addressing both substance abuse and child abuse will require courage and dedication on the part of many–American Indian and Alaska Native communities, their leaders, staff in treatment facilities, federal policy makers, and the victims of such abuse.

4. Need for Improved Coordination of Care and Support Services.

Some centers provide a broad range of care, and every center provided referrals to clients for mental health, medical, social service, housing, and other needs. Many centers (45%) provide transportation from home to the center; less than one-quarter (23%) provide child care services while mothers receive A/SA treatment. Some of the centers have developed innovative approaches to providing shelter and safe housing to homeless clients.

The follow-up of the clients in the study suggest that safe housing is critical to the maintenance of sobriety achieved during A/SA treatment. The ability of some women in this study to remain sober was threatened when they were homeless and when they were again subjected to physical, emotional, or sex abuse.

The identification and coordination of services and care needed by AI/AN women with addiction problems is made difficult by the absence of integrated systems. These clients have manifold critical needs–treatment for traumas experienced, safe housing, job training and placement services, substance abuse treatment, child care, transportation, independent living skills training and parent education. Funding and administration of relevant programs are splintered across different tribal,

state, and federal departments and agencies. Consequently, it is almost impossible for a tribal treatment center to provide or even coordinate the needed services. A holistic integrated service delivery system, similar to the "One-Stop" centers developed under the Workforce Investment Act (WIA) of 1998 could facilitate the needed coordination of care and services. Better coordination and collaboration is needed between IHS funded A/SA programs and other programs such as the Welfare-to-Work and Temporary Assistance to Needy Families (TANF) programs.

List of Attachments

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List of Areas Identified by IHS to Guide the Study

Attachment 2:

List of Technical Advisory Committee (TAC) Members

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Original Study Sample

Attachment 5.

Data Collection Instruments (DCIs)

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List of the Data Collection Team

Attachment 7:

Site Visit Summary Form, Site Visit Schedule and Agenda

Attachment 8:

Composite Scales used in Data analysis