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("Sub-Acute Peceivin: Centers").

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PTOPS

**Detoxification Centers

Results are reported of a study to determine the impact of detoxification centers on the people who use their services. A detoxification center is "a social rehabilitation facility established for the purpose of facilitating access into care by detoxifying and evaluating the person and establishing into the continuum of care." One hundred sixty clients who had been discharged from any of six centers in Minnesota were interviewed two weeks and three months after discharge. Only clients who had signed consent slips were contacted. Results are organized into six categories: client characteristics, client reaction to chemical dependency program, referral practices, changes in use of alcohol or other drugs, changes in clients' lives, and benefits of the study. Specifically, most of the sample was involved primarily with substance abuse; almost half the study was new to detoxification. Ultimately 60% felt they benefited from the detoxification center. Saving the center, most clients were referred to a residential treatment program; other referrals included Alcoholics Anonymous and identical programs. Three months following discharge 49% of the clients claimed that they had not taken a drink in the prior month; 51% were drinking as much as or more than before. Also, 34% said that their employment situation and their emotional makeup were much better than before. Other conclusions of the study are that a high rate of repeated use of detoxification centers exists, medical treatment of detoxification varies considerably from center to center, and that there is a risk of violation of patient rights and liberties under current practices. (KC)
CLIENT IMPACT STUDY
OF SIX DETOXIFICATION CENTERS
("SUB-ACUTE RECEIVING CENTERS")

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PERFORMED UNDER CONTRACT NUMBERS 29055-29056 AND 37059
TO THE MINNESOTA DEPARTMENT OF PUBLIC WELFARE
MARCH 30, 1979
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CLIENT IMPACT STUDY
OF SIX DETOXIFICATION CENTERS ("SUB-ACUTE RECEIVING CENTERS")

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INTRODUCTION

In 1971, the Minnesota Legislature provided an appropriation of $500,000 for development of a statewide network of detoxification services.\(^1\) This action closely followed the legislature's repeal of the Public Drunkenness Law, to remove police authority to arrest an individual for public intoxication.

By law,\(^2\) a detoxification center is "a social rehabilitation facility established for the purpose of facilitating access into care and rehabilitation by detoxifying and evaluating the person and providing entrance into the continuum of care."

Minnesota's Department of Public Welfare (DPW) was charged with administering the system of detoxification services. An administrative rule (DPW Rule 32) was written to govern the licensing and operation of "sub-acute receiving centers" (a medical term for detoxification centers) for intoxicated persons. Only "detox centers" for five or more persons are covered by the Rule.

In the fiscal year from July 1977 to June 1978 (FY 1978), there were 32,515 discharges from detox centers throughout Minnesota, costing $6,151,658 in State and local taxes. Costs of detox services vary, from $51.89 to $134.59 per day of service, depending on the center (the statewide average is $60.25). With an average length of stay of 3.1 days, the cost is $186.78 per discharge.\(^3\)

Little is known about the impact of detoxification services on people. In 1977, the Department of Public Welfare began a "client impact study," using Federal funds allocated through the Uniform Alcoholism Act, to learn about the effects of detoxification services on people who use these services.

\(^1\) Minnesota Statutes, 1971, Chapter 892
\(^2\) Ibid.
\(^3\) Source: Community Programs Division, Minnesota Department of Public Welfare, 1979.
The study was designed by Steven E. Mayer, Evaluation Coordinator for the Chemical Dependency Program Division, Minnesota Department of Public Welfare, with the assistance of Judie Steiner, Follow-up Coordinator, both under consultant contract for FY78. In FY79, Rainbow Research, Incorporated was formed and contracted with DPW's Chemical Dependency Program Division to complete the analysis of the data and provide results of the study.

The specific purposes of the study were to:

1) Learn more about the people who use detox services.
2) Get clients' reactions to the services of detoxification centers.
3) Learn whether clients pursue the center's referral to other services in the "continuum of care."
4) Learn in what ways people change their drinking and other chemical use.
5) Learn in what ways various areas of clients' lives have changed since being in the detox center.
6) Test the feasibility of this type of study as a way to assess the quality of chemical dependency services.

Three Area Mental Health Boards (charged by law to administer and evaluate several kinds of chemical dependency services, including detox) were selected to be "host" Area Boards for the project. Each Board hired a full-time person to interview detox clients two weeks after they had been discharged, and again three months after discharge.

Using the host Area Board arrangement, six detox centers were studied. These were:

**DETOX CENTERS**

1) St. Paul/Ramsey Receiving Center
2) Mankato (St. Joseph-Immanuel Hospital)
3) Fairmont (Chain of Lakes Receiving Center)
4) New Ulm Detoxification Center
5) Brainerd (Crow Wing County Receiving Center)
6) St. Cloud (Central Minnesota Receiving & Referral Center)

**HOST BOARDS**

- St. Paul/Ramsey Community Mental Health Board
- Blue Earth Human Services Board
- Northern Pines Area Mental Health Board

Table 1 gives a statistical description of the detox centers included in this study, covering the period from July 1, 1977 through June 30, 1978.
### TABLE 1. CAPACITY, CLIENT FLOW, AND COST FOR DETOX CENTERS INCLUDED IN THE STUDY  
(JULY 1, 1977 - JUNE 30, 1978)

<table>
<thead>
<tr>
<th></th>
<th>Bed Capacity</th>
<th># of Discharges</th>
<th>Average Length of Stay (Days)</th>
<th>Average Expenditures</th>
<th>Average Cost Per Discharge</th>
<th>Average Cost Per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Paul</td>
<td>95</td>
<td>3601</td>
<td>3.4</td>
<td>$712,843</td>
<td>$197.96</td>
<td>$ 58.07</td>
</tr>
<tr>
<td>Mankato</td>
<td>12</td>
<td>749</td>
<td>2.5</td>
<td>187,732</td>
<td>250.64</td>
<td>100.25</td>
</tr>
<tr>
<td>Fairmont</td>
<td>4</td>
<td>261</td>
<td>3.2</td>
<td>53,921</td>
<td>206.59</td>
<td>65.12</td>
</tr>
<tr>
<td>New Ulm</td>
<td>4</td>
<td>224</td>
<td>2.4</td>
<td>72,139</td>
<td>322.05</td>
<td>134.59</td>
</tr>
<tr>
<td>Brainerd</td>
<td>4</td>
<td>539</td>
<td>2.7</td>
<td>116,352</td>
<td>215.87</td>
<td>79.31</td>
</tr>
<tr>
<td>St. Cloud</td>
<td>20</td>
<td>970</td>
<td>2.8</td>
<td>173,491</td>
<td>178.85</td>
<td>63.88</td>
</tr>
</tbody>
</table>

Source: Community Assistance Division, Minnesota Department of Public Welfare, 1979
STUDY METHODS

Interviews were conducted with 395 people discharged from six detox centers during the period from November 1, 1977 through April 4, 1978. A total of 518 interviews were conducted at two intervals; 250 interviews were conducted two to three weeks after clients were discharged, and 268 interviews were conducted approximately three months after discharge. A total of 126 people were interviewed at both intervals. See Table 2.

Selection of Participants

Everyone discharged from the six detox centers during the above period was eligible for the study. The study period covered 21 weeks and included 2,296 discharges\(^1\) from all of the detox centers combined.

At discharge, clients were presented with a letter explaining the study purposes and requesting their participation in the project. Clients were asked to sign a "permission form" authorizing the interviewer to contact them. Detox personnel were responsible for presenting the letter, obtaining a signature on the permission form, and filing the form in the client's file. One of the interviewers' responsibilities was to list all discharges and indicate whether or not the clients agreed to participate.

Approximately 94% of all discharges\(^1\) were recorded as having received a permission form, and 76% of these discharges agreed to be contacted. Attrition from the total population of discharges was created from the following factors: 1) 14% resided out of the study area (counties served by the detox centers); 2) 13% could not be located; 3) 12% represent people who had already been discharged at least once within the study period; 4) 16% were thought to be in treatment; and 5) approximately 8% refused to be interviewed, or could not be interviewed before the time

---

\(^1\) One must note that "number of discharges" does not equal "number of people." One person may be admitted and discharged more than once. Unfortunately, DPW records are based on discharges, and translation into "individuals" is impossible.
limitation (three weeks from discharge date). Approximately 11% of the total discharges were interviewed.

Some clients who could not be reached at the two week interval were interviewed at the three month interval.

Procedure for Contacting and Interviewing Clients

Interviewers contacted clients by phone, two weeks after discharge from detox, to arrange for an interview. Only clients who signed the permission form were contacted, in keeping with State privacy regulations.

Prior to the interview, interviewers collected demographic and case management information on each client from detox records. Some verification was done during the interviews, partly to assist clients' recollections of circumstances surrounding use of detox services, and partly to determine agreement between detox records and self-report. A "non-interview questionnaire" was developed to record client case file information.

Approximately 50% of the interviews were conducted in person at the interviewers' offices or some other place convenient for the client. The rest of the interviews were conducted on the phone. Overall, the interviews averaged 50 minutes in length.

There was much speculation prior to this study with regard to the credibility of clients' self-report. Interestingly, interviewers reported a high level of candidness among the interviewed group. Most of the clients were described as sober by the interviewers at the time of the interview; only a few were noted as "not ascertainable" or "medicated, but coherent."

Those interviewed were also reported to be cooperative, with few incidences of hostility toward the interviewer.
### TABLE 2. DISTRIBUTION OF INTERVIEWS AND PEOPLE INTERVIEWED BY CENTER

<table>
<thead>
<tr>
<th></th>
<th>St. Paul</th>
<th>Mankato</th>
<th>New Ulm</th>
<th>Fairmont</th>
<th>Brainerd</th>
<th>St. Cloud</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of Two-Week Interviews</strong></td>
<td>118</td>
<td>48</td>
<td>12</td>
<td>19</td>
<td>23</td>
<td>31</td>
<td>251</td>
</tr>
<tr>
<td><strong>Number of Three Month Interviews</strong></td>
<td>119</td>
<td>48</td>
<td>11</td>
<td>21</td>
<td>21</td>
<td>48</td>
<td>268</td>
</tr>
<tr>
<td><strong>Total People Interviewed</strong></td>
<td>185</td>
<td>67</td>
<td>16</td>
<td>31</td>
<td>33</td>
<td>63</td>
<td>395</td>
</tr>
</tbody>
</table>

*126 clients were interviewed at both the two-week and three-month interval. Consequently, the total number of interviews does not equal the number of people interviewed.*
Coordination of Data Collection

Training for interviewers began with a three-day workshop conducted by the Project Coordinators. The workshop included: Overview of study objectives, discussion of attitudinal issues surrounding chemical use and implications for biased data collection, instruction in interviewing techniques, and scheduling procedures, explanation of the instruments, and role-play of interview situation.

The interview questionnaire, developed by the Project Coordinator with input from the Area Mental Health Boards and detox center directors, was revised on the basis of the training exercises, and a field test was then conducted on clients discharged prior to November 1, 1977. The Project Coordinators and interviewers then met again for further discussion of procedures and revision of the study instruments.

On-site visits by the follow-up coordinator occurred several times for most centers, to assist interviewers in coordinating their schedules.

Summaries of discharges, attrition, and completed interviews were submitted weekly to the project office.

Two-week interviews, designed primarily to describe detox clientele and to get reactions to programming, were conducted through March 19, 1977; three-month interviews began in February 1977, and were conducted until the end of the project. Interviewers received further training on administration of the three month questionnaire, which was designed primarily to reflect changes in major life areas since detox.

Completed three-month interviews included clients who were in a residential program at the time of the two-week contact, clients who were interviewed at two weeks, and/or clients who were not available at the two-week interval.

In May 1978, the interviewers collected demographic and admittance information on clients who had refused to sign the permission form, for comparison with the interviewed group, to learn in what ways, if any, the study was a biased sample.
Many problems surfaced during the project that were not anticipated when the study was originally designed. Some items on the non-interview instrument were not compatible with all the detox centers' records, creating difficulties in coding and analysis. Receipt of completed interviews and client summaries was not always timely. Summaries and collected data were occasionally inaccurate and time was lost before corrections could be made. Interviewers were not able to adhere to scheduling procedures because of varying circumstances in their respective areas. This led to an eventual imbalance in the workload and productivity among the follow-up staff.

Problems encountered throughout the project may be attributed to the following:

1) Practices within each detox center differed with respect to admitting and discharging clients, record keeping, client assessment and referral processes.

2) Client flow varied greatly from center to center, requiring a different level of activity for each interviewer.

3) The distances covered by interviewers made scheduling and interviewing difficult to coordinate and monitor.

4) The monitoring of the study had to be done primarily by phone from the project coordinators' offices, making study management difficult.

5) There was no precedent for this type of study (an ongoing interval follow-up of detox clients from different centers).

Procedures for Analysis

Completed questionnaires were reviewed by the data coordinator for completeness and clarity, and a codebook was developed to enable the data to be coded for keypunching. Response categories were developed to open-ended questions by reviewing 40 (20 two-week and 20 three month) questionnaires and summarizing them into general response categories. Additional questionnaires were then reviewed to verify that the response categories were sufficient to include the variety of individual responses.
Coders were hired to translate the data from the questionnaires to computer coding forms. All coders had previous experience with chemical dependency programs, or previous experience coding computer forms for keypunching. Training session were provided for the coders to enable all data to be transferred consistently and accurately. In addition, supplementary information sheets were provided to coders to assist them in interpreting clients' responses. Keypunching was done by both the University of Minnesota's keypunching services and Codo Keypunching.

The first computer runs on each questionnaire were primarily done to verify ID numbers and check for internal consistency within the data. The coding and keypunching error rates were between 1% and 3%.

Since each questionnaire was punched as soon as completed, it was necessary to merge the data for all three questionnaires before an in-depth analysis could be attempted. The merged "master file" contained approximately 600 variables per case.

All analyses were run using the Statistical Package for the Social Sciences (SPSS) at the University of Minnesota Lauderdale Computer Center.

One of the major problems of analyses was deciding what to do about missing information. Recording practices in client case files were somewhat incomplete, and thus the data base also reflected the missing information. Generally, missing data were excluded from any analysis.

Is This Study Sample a Biased Sample?

There is always the probability that people who agreed to participate in the study and were then successfully interviewed are "different" in ways that might suggest the invalidity of these results. To test this, a sample of detox clients who had refused to participate in the study was randomly drawn at each detox center, in the same number as clients who had agreed to participate, and covering the same time period.
Five pieces of information were recorded from the case files (DPW client record) of each person in this "refused to participate" group, for comparison with the interviewed group.

**Age.** For the total sample, the age distribution was the same for those who refused as for those who participated, although in St. Cloud, Fairmont, and New Ulm, the interviewed group was more likely to be older (more people over 40 rather than under 40).

**Sex.** For the total sample, and at each of the centers, the sex breakdown was the same between those who refused and those who were interviewed.

**Employment Status.** For the total sample and for St. Paul and Brainerd, the group that was interviewed had a significantly higher employment rate than the group that refused.

**Police Accompaniment to Detox.** For the total sample, and for Mankato and Fairmont, the group that refused had a significantly higher percent of people brought in by police.

**Drug of Intoxication.** For the total sample, and for St. Paul, the group that agreed to participate was more likely to be involved with drugs other than alcohol at admission than the group that refused. In St. Cloud, the situation was reversed.

**Previous Admission to Detox.** For the total sample, and for each of the centers, there was no difference between the interviewed group and the group who refused, when previous visits were counted as "one or more previous visits" versus "no previous visits."

**Summary.** The study tended to include, in disproportionate numbers, a group that was more employed, more accessing of detox by means other than police, and more involved with drugs other than alcohol than the group that refused to participate. Stated the other way, the group that
refused was more unemployed, more accessing of detox by police, and involved more with alcohol than with other drugs. But, both groups were equally new to detox services. It is possible that these differences biased the sample so outcomes appear more positive than if the entire population had been included in the study.
QUESTION: What are the age, sex, and race characteristics of people who use detox, and how do they compare to the general population?

ANSWER: Detox case files were examined for age, sex, and race characteristics and then compared with the 1970 Minnesota census data. Almost 80% (78.0%) of the detox clients were between 20 and 59 years of age. In the general population, only 62.4% are in this age group. In other words, the young and the old are not as likely to be admitted to detox as people who are middle aged. The mean age of the sample was 41.0 years and the median age was 40.1 years. There were no significant differences between the centers with respect to age. Table 3 compares age of the general population with age of the detox sample.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>General Minnesota Population</th>
<th>Detox Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-19 years</td>
<td>10.2%</td>
<td>7.1%</td>
</tr>
<tr>
<td>20-59 years</td>
<td>62.4%</td>
<td>78.0%</td>
</tr>
<tr>
<td>60+ years</td>
<td>27.4%</td>
<td>14.8%</td>
</tr>
</tbody>
</table>

In the general population, the number of men and women are almost equal (48.0% male and 52.0% female). The detox sample was significantly different and contained mostly men (84.5%).

The detox sample tended to have a disproportionate percentage of minority clients when compared to the general Minnesota population. Table 4 reveals that American Indians are the primary minority users of detox.
<table>
<thead>
<tr>
<th>Race</th>
<th>General Minnesota Population</th>
<th>Detox Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>98.2%</td>
<td>92.6%</td>
</tr>
<tr>
<td>Black</td>
<td>0.9%</td>
<td>0.6%</td>
</tr>
<tr>
<td>American Indian</td>
<td>{4.3%}</td>
<td></td>
</tr>
<tr>
<td>Chicano/Latino</td>
<td>{1.1%}</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>1.1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
QUESTION: What are the employment and financial situations of the detox sample and how do they compare to the general population?

ANSWER: Clients were asked at follow-up what their employment status had been in the month before their admit to detox. The employment status of the detox sample was only slightly less than the general population. In the detox sample, 54.2% were employed full or part time; in the general population, 59.9% of those over 16 are employed full or part time. Table 5 compares the major sources of income for the detox sample with the general population.

<table>
<thead>
<tr>
<th>TABLE 5. SOURCES OF INCOME FOR GENERAL POPULATION AND DETOX SAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Minnesota Population</td>
</tr>
<tr>
<td>Job</td>
</tr>
<tr>
<td>Spouse</td>
</tr>
<tr>
<td>Family or Friends</td>
</tr>
<tr>
<td>Pension &amp; Social Security</td>
</tr>
<tr>
<td>Public Assistance</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

Figure A reveals that clients who utilize detox the most generally have had more financial and job problems. The following highlights were found to be true for the entire detox sample as a whole. Generally, there was a direct relationship between the number of previous detox admits and response showing negative impact of use on employment. That is, repeaters generally had more employment and financial problems.
-- Thirty-five percent say in the last three years that they have lost a job, or nearly lost one because of drinking or use of other drugs. (n=371)

-- Forty percent say that people at work have indicated they should cut down on their use (in the last three years). (n=370)

-- Sixty-six percent expressed some satisfaction with their job. (In the general population 87% express some satisfaction with their job.) (n=289)

-- Twenty-two percent rate their financial situation as poor; 11.5% rate it as excellent. (n=393)

-- Fifty-six percent say their drinking has been harmful to their financial position or caused financial hardship. (n=393)

-- The sample interviewed includes a disproportionate number of employed people; those who refused to participate had a much higher percentage of unemployed people (68%). Also, detox centers draw a disproportionate number of males (85%), who have a higher employment rate than women.
Employment & Finances

Major Source of Income:

- Job
- Public Assistance
- Pension or Savings
- Spouse, Family, or Friends

In the last three years...

- client has lost or nearly lost a job because of chemical use
- people at work have indicated client should cut down on chemical use
- chemical use has caused financial hardship

# of Previous Visits

<table>
<thead>
<tr>
<th>Key</th>
<th>0</th>
<th>1-2</th>
<th>3-5</th>
<th>6+</th>
<th>Total Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6+</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Sample</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
QUESTION: How is the health of the detox sample and how does it compare to the general population?

ANSWER: At follow-up, detox clients were asked several questions about their health and health habits prior to their admit. Figure B shows that clients who have had more admits to detox, generally had poorer health.

-- Twenty-eight percent had spent at least one night in a hospital in the last year, for reasons other than chemical dependency treatment. (In the general population, only 18% had spent at least one night in a hospital.) (n=395)

-- Thirty-eight percent said they did not eat well, or only sometimes ate well. (n=394)

-- Forty-four percent said that a physician suggested they cut down on drinking (n=393). A strong relationship was found between the number of previous admits to detox and the likelihood that a physician had suggested that the person cut down.

-- Forty-five percent said they had suffered illness or accident because of drinking or use of other drugs. (n=393)
**FIGURE B**

**Health**

<table>
<thead>
<tr>
<th>%</th>
<th>10%</th>
<th>30%</th>
<th>50%</th>
<th>70%</th>
<th>90%</th>
</tr>
</thead>
</table>

- Client has spent at least one night in a hospital in past year (for other than chemical dependency treatment)
- Client does not eat well, or eats well only sometimes
- A physician has suggested that client cut down on drinking
- In the last three years, client has suffered illness or accident because of chemical use

<table>
<thead>
<tr>
<th># of Previous Visits</th>
<th>KEY</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1-2</td>
<td></td>
</tr>
<tr>
<td>3-5</td>
<td></td>
</tr>
<tr>
<td>6+</td>
<td></td>
</tr>
<tr>
<td>Total Sample</td>
<td>0---0---0---0---0---</td>
</tr>
</tbody>
</table>

---

page 18.
QUESTION: What kind of social and family life do most detox clients have?

ANSWER: At follow-up, clients were asked several questions about their family and social life. Table 6 compares the living arrangements of the detox sample with the general population. A significantly smaller percentage of detox clients live with their families (n=392).

<table>
<thead>
<tr>
<th>Table 6. Living Arrangements of General Population and Detox Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Minnesota Population</td>
</tr>
<tr>
<td>--------------------------------</td>
</tr>
<tr>
<td>Live alone</td>
</tr>
<tr>
<td>Live with family</td>
</tr>
<tr>
<td>Live with others</td>
</tr>
</tbody>
</table>

Figures C and D reveal that the frequency of admits to detox is related to both social and family life conditions. Those clients who had six or more previous admits seemed to stand out from the others with respect to the degree that alcohol or other drugs has affected their lives. In the total sample:

--- Twenty-one percent said they live with someone who has a drinking problem or who has been admitted to detox. (n=390)

--- Thirty-two percent said that they didn't have anyone that they could share their feelings with. (n=393)

--- Seventy-one percent said that most of their friends drink or use drugs as much as they do. (n=390)

--- Eighteen percent they did not have a good social life. (n=391)
-- Thirty-five percent said they had gotten into fights while drinking. (n=393)

-- Thirty-four percent said they had gotten violent with members of their family when they were drinking or using other drugs. (n=391)

-- Seventy-two percent said that their significant other had shown concern over their drinking, or said they should cut down. (n=384)

-- Forty-one percent said that their significant other had left or threatened to leave because of drinking or use of other drugs. (n=370)

-- Thirty-seven percent of the sample were married, 29% were never married, 24% were divorced, and 10% were widowed or separated. (n=360) (Data from case files.)
Drinking has been involved in losing a friendship.

Client has friends with similar chemical use patterns.

Client has gotten into fights while drinking.

Client does not have a good social life.

Client does not have anyone with which to share feelings.

<table>
<thead>
<tr>
<th># of Previous Visits</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
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<td>1-2</td>
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<td>3-5</td>
<td></td>
</tr>
<tr>
<td>6+</td>
<td></td>
</tr>
<tr>
<td>Total Sample</td>
<td></td>
</tr>
</tbody>
</table>
FIGURE D

**Family Life**

- Client lives alone
- Client lives with family
- Client lives with others
- Client lives with someone who has been in detox or has a drinking problem

*In the last three years...*

- ...client's significant other has shown concern over client's drinking
- ...client's significant other has left or threatened to leave because of client's drinking
- ...client has often gotten violent with family members when drinking

<table>
<thead>
<tr>
<th># of Previous Visits</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>6+</td>
</tr>
<tr>
<td></td>
<td>TOTAL SAMPLE</td>
</tr>
</tbody>
</table>

27
QUESTION: What are the chemical use patterns of detox center clients?

QNSWER: Clients were asked (A) how often they used alcohol and a
variety of other drugs, and (B) several questions typically
used on chemical dependency assessment questionnaires.

(A) Table 7 shows the frequency of use of alcohol and a variety
of other drugs, in the month preceding admission to detox.
The questions were asked of the two-week sample only.

--- The detox clientele are primarily alcohol users. All
but 2% said they'd used alcohol in the month prior
to detox, typically one to four days a week. Twenty-
six percent said they drank alcohol five to seven
days a week.

--- Most of the other drugs were used by only a small minority
of the sample. Marijuana was used by 16%, tranquilizers
by 12%, and the other chemicals by less than 6%.

--- Eleven percent of the sample said they had not drunk
alcohol that month prior to the "slip" that resulted
in their admission to detox.

(B) Table 8 shows responses to questions used by Dr. Donald
Cahalan and his associates at the University of California's
School of Public Health, in their national surveys of
"problem drinking" in the general population. Each item is
considered symptomatic of "problem drinking." These items
are often used in the diagnosis of alcohol or chemical
dependency. The questions were asked of the two-week sample
only.

--- Unusually large proportions of people using detox
services describe themselves in terms indicative of
problem drinking. The percentages shown are far in
excess of the rates in the general population.
People with a history of using detox services show even significantly higher rates of "symptomatic use" than people new to detox services.

The sample interviewed tends to include a disproportionate number of people involved with drugs other than alcohol, compared to those who refused to participate.
TABLE 7. CHEMICAL USE IN MONTH PRIOR TO DETOX ADMISSION

<table>
<thead>
<tr>
<th></th>
<th>Not At All</th>
<th>Less Than Once/ Week</th>
<th>1 - 4 Days/ Week</th>
<th>5 - 7 Days/ Week</th>
<th>Not Used Until Slip</th>
<th>Irregular Periods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>1.6%</td>
<td>13.2%</td>
<td>44.0%</td>
<td>25.9%</td>
<td>11.1%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Marijuana</td>
<td>84.4%</td>
<td>5.6%</td>
<td>5.2%</td>
<td>4.0%</td>
<td>0.4%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Barbiturates</td>
<td>97.2%</td>
<td>0.8%</td>
<td>1.6%</td>
<td>--</td>
<td>0.4%</td>
<td>--</td>
</tr>
<tr>
<td>Amphetamines</td>
<td>94.8%</td>
<td>1.2%</td>
<td>1.6%</td>
<td>1.6%</td>
<td>0.8%</td>
<td>--</td>
</tr>
<tr>
<td>Tranquilizers</td>
<td>88.4%</td>
<td>3.2%</td>
<td>1.6%</td>
<td>5.2%</td>
<td>0.4%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Pain Killers</td>
<td>94.4%</td>
<td>1.6%</td>
<td>2.0%</td>
<td>1.6%</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Opiates</td>
<td>99.2%</td>
<td>--</td>
<td>0.4%</td>
<td>0.4%</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Hallucinogens</td>
<td>98.2%</td>
<td>0.4%</td>
<td>0.8%</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Cocaine</td>
<td>97.2%</td>
<td>2.0%</td>
<td>0.8%</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Inhalants</td>
<td>100.0%</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Over-the-Counter</td>
<td>93.2%</td>
<td>1.2%</td>
<td>4.0%</td>
<td>1.2%</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

N=251 (Two-week interview)
### TABLE 8. ALCOHOL AND DRUG USE:
SELF PERCEPTIONS OF "SYMPTOMACTIC USE"

<table>
<thead>
<tr>
<th>Question</th>
<th>Total Sample</th>
<th>Breakdown by Number of Previous Visits to Detox</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Sometimes do you keep on drinking when you have promised yourself not to?</td>
<td>63%</td>
<td>57%</td>
</tr>
<tr>
<td>Are you worried about your drinking a lot?</td>
<td>52%</td>
<td>41%</td>
</tr>
<tr>
<td>Are you, or were you, an alcoholic?</td>
<td>61%</td>
<td>44%</td>
</tr>
<tr>
<td>Have you ever skipped regular meals while drinking?</td>
<td>58%</td>
<td>45%</td>
</tr>
<tr>
<td>Have you tossed down several drinks to get a quicker effect?</td>
<td>51%</td>
<td>40%</td>
</tr>
<tr>
<td>Have you awakened the next day unable to remember what you had done the night before?</td>
<td>76%</td>
<td>66%</td>
</tr>
<tr>
<td>Have you taken a drink first thing in the morning?</td>
<td>44%</td>
<td>29%</td>
</tr>
<tr>
<td>Have you had shaking hands a lot after drinking?</td>
<td>46%</td>
<td>31%</td>
</tr>
</tbody>
</table>

N=247 to 249 per question (two-week interview)
QUESTION: Had people used detox services, or other chemical dependency services, before this detox admit?

ANSWER: Client files were searched for notation of clients' history of detox services.

-- Use of detox (case file data, n=395)
  55% had never before been to that detox center
  24% had been there one to two times before
  9% had been there three to five times before
  6% had been there six to eight times before
  6% had been there nine or more times before

-- Use of residential chemical dependency services (case file data, n=395)
  56% had never been to residential chemical dependency services
  44% had been to residential services at least once

-- Use of non-residential chemical dependency services (case file data, n=395)
  4% had been to the Mental Health Center, or seen a county counselor
  2% had received counseling elsewhere
  1% had been in a growth group, or marital counseling
  3% had been in an outpatient chemical dependency program
  2% had been in an Antabuse program

-- Use of AA
  27% had attended AA, at least irregularly (2% say they have attended regularly)
  17% have never attended AA
  56% have no record of AA attendance in the case files
QUESTION: How are people brought to detox?

ANSWER: Client files were examined for DPW's client record form, which asks how the client was brought to detox.

Table 9 gives a breakdown of how people are brought to detox, and charts the proportion of different subgroups who are brought in by the police.

-- More people are brought in by police (47%) than by any other method.

-- Fifteen percent come in alone, 13% are brought in by a friend, and 12% are brought in by a spouse or other relative.

-- Fifty-four percent of the people who have never been to detox before are brought in by police. People who have been to detox six or more times are much less likely to be brought in by police (28%), and more likely to come in alone or be brought in by a friend, or by MHC staff.

-- Males are no more likely to be brought in by police than are females.

-- There are differences from center to center in the way clients access detox. Access through police varies from 38% to 39% in St. Cloud and Brainerd, 48% to 50% in St. Paul, Mankato, and New Ulm, and 61% in Fairmont. Coming in alone ranges from 7% in Fairmont to 31% in New Ulm. Coming in with a Mental Health Center or detox staff member ranges from 2% in St. Paul, 7 to 15% in New Ulm, Brainerd, St. Cloud and Mankato, and 26% in Fairmont.

-- Females are more likely than males to be brought in by a friend or relative (not a spouse).
-- At follow-up, 45% of the sample said they had felt pressured to go to detox (n=382). At the time of the follow-up interview, 28% of these still had negative feelings about that experience.

-- The sample interviewed underrepresents the percentage of people actually brought in by police, according to a check of the files of those people who refused to participate in the study.
TABLE 9

Urged To Detox

15% Self
2% County Counselor
47% Police
13% Friend
8% Other Relative
7% Detox, MHC, HSB
4% Spouse
5% Other

395 people sampled of total detox population

VARIOUS SUBGROUPS BROUGHT IN BY POLICE

<table>
<thead>
<tr>
<th>Total Detox Population</th>
<th>18 years old or less</th>
<th>60 years old or older</th>
<th>Female</th>
<th>Intoxicated, needed help</th>
<th>No previous admits to detox</th>
<th>6 or more admits to detox</th>
<th>Prior use of any residential program</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>25/57</td>
<td>33/12</td>
<td>19</td>
<td>13/46</td>
<td>58/12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
QUESTION: In what condition are people admitted to detox?

ANSWER: DPW Rule 32, covering detox centers, states that detox centers shall serve, in order of priority, 1) any person who appears intoxicated, 2) any person in need of evaluation of chemical abuse/dependency problems, 3) any person in danger of relapse or seeking entry into the continuum of care and/or being held pending legal placement into the continuum of care.

Client files were examined for evidence of degree of intoxication at admission.

--- Eight percent of those admitted were not intoxicated.

--- Seventy-seven percent were known to be intoxicated, 36% so much so that they needed help at admission.

--- Degree of intoxication is not discernible in 16% of the files.

--- Clients' self-reports on degree of intoxication tend to agree with the case files. Six percent of the clients said they felt that they didn't need detoxification, when asked if they were intoxicated.

--- There are differences from center to center. In Fairmont, 13% were not intoxicated at admission. St. Paul clients are disproportionately more intoxicated, although there are no notes in 30% of the files.
QUESTION: How long do people stay in the detox center?

ANSWER: Data came from clients' files (DPW's client record form, n=395). Results are shown in Table 10.

- Sixty-four percent are discharged within 72 hours. Fifteen percent stay less than 24 hours. Seven percent stay longer than five days.

- Older people stay longer than younger people.

- Males and females stay the same amount of time.

- Those clients who were never married make up 27.3% of the detox population, but make up 43% of those who stay for less than one day.

- Employed people are somewhat more likely to get out of detox within 72 hours than are unemployed people.

- People who were "intoxicated, but under own power" were more likely to get out in 72 hours than were people "heavily intoxicated, needing help."

- Forty-five percent of the people who were not intoxicated at admission (8% of the detox population) stayed longer than 72 hours.

- Length of stay is most strongly related to the number of previous visits to detox. For those with no previous visits, 70% were discharged within 72 hours; for those with six or more visits, 48% were discharged within 72 hours.

- Those clients who had previously been in residential treatment tended to stay in detox longer than those who had not been in residential treatment.
TABLE 10

LENGTH OF TIME IN DETOX

- 14% 24 or LESS HOURS
- 19% 25-48 HOURS
- 29% 49-72 HOURS
- 21% 73-96 HOURS
- 8% 97-120 HOURS
- 2% 121-144 HOURS
- 1% 145-168 HOURS
- 1% 169-192 HOURS
- 1% 193-216 HOURS
- 1% 217 OR MORE HOURS

BASED ON 395 PEOPLE SAMPLED OF TOTAL DETOX POPULATION

PROPORTION OF DIFFERENT SUBGROUPS HELD LONGER THAN 72 HOURS

- 14% of 3794 TOTAL DETOX POPULATION
- 10% of 24 18 YEARS OLD OR LESS
- 23% of 57 60 YEARS OLD OR OLDER
- 22% of 72 FEMALE
- 5% of 42 INTOXICATED, NEEDED HELP
- 4% of 19 NO PREVIOUS ADMITS TO DETOX
- 7% of 172 6 OR MORE ADMITS TO DETOX
- 7% of 172 PRIOR USE OF ANY RESIDENTIAL PROGRAM
QUESTION: How are people held at the detoxification center?

ANSWER: The Hospitalization and Commitment Act (Minnesota Statutes, Chapter 253A.04) provides for the "emergency hospitalization of mentally ill and mentally deficient persons." Subdivision 2 of this section says that "a peace or health officer...may take a person who is intoxicated in public into custody and transport him to a licensed hospital, mental health center facility...Application for admission of an intoxicated person...shall be made by the peace or health officer...and the application shall contain a statement given by the peace or health officer stating the circumstances under which such person was taken into custody and the reasons therefor."

Subdivision 3 states that any person hospitalized pursuant to this section may be held up to 72 hours after admission, exclusive of Saturdays, Sundays, and legal holidays.

Client files were examined for documentation supporting a 72-hour hold. Results are shown in Table 11.

-- Sixty-seven percent were on 72-hour hold. Of these, 70% show no documentation authorizing or supporting this hold.

-- Practices regarding use of the 72-hour hold vary from center to center, reflecting differences in advice and rulings from attorneys and county judges.

In St. Paul, all but two people in the sample were allegedly on 72-hour hold, but there was no documentation of this hold in 97% of the clients' files. St. Paul clients are routinely told they can be held for 72 hours. In the other five centers most people (62%) were not "on hold" and for those that were, there was a written authorization in 94% of the cases.
TABLE 11

THE AUTHORITY BY WHICH A 72 HOUR HOLD WAS INITIATED

- 18% Police-Court Authority
- 2% Medical Authority
- 33% Not on 72 hour hold
- 47% No Clear Authority

Based on 395 people sampled of total detox population

PROPORTION OF DIFFERENT SUBGROUPS HELD ON NO CLEAR AUTHORITY

- 18/291
- 1/24
- 11/57
- 38/72
- 75/141
- 91/218
- 35/46
- 31/170

TOTAL DETOX POPULATION
16 YEARS OLD OR LESS
60 YEARS OLD OR OLDER
FEMALE
INTOXICATED, NEEDED HELP
NO PREVIOUS ADMITS TO DETOX
6 OR MORE ADMITS TO DETOX
PRIOR USE OF ANY RESIDENTIAL PROGRAM
QUESTION: How is detoxification managed?

ANSWER: Detoxification from alcohol and/or other drugs is a process requiring medical procedures to prevent harmful complications of withdrawal. Medical procedures include testing vital signs at admission, and monitoring vital signs periodically throughout detoxification, to support decisions of appropriate medical care. While the medical management of detoxification was not a major area of inquiry in this study, some data were gathered from the files to serve as comparison with clients' self-report of their physical condition at the time of discharge. Results are shown in Tables 12 and 13.

Data came from case files.

(A) Tests of vital signs at admission.

-- Eighty-eight percent of admission had vital signs tested and recorded at the time of admission.

-- If another drug besides alcohol was suspected at admission, vital signs were tested and recorded in all cases.

-- There are differences among centers in the kinds of vital signs recorded. In New Ulm, no vital signs are recorded. The other centers show tremendous variability in their practices of recording temperature and/or blood pressure and/or pulse and/or breathing or respiration.

(B) Monitoring of vital signs during clients' stay, and other tests.

-- There is quite some variability in how often vital signs are monitored during people's stay in detox. They are monitored and recorded at least once a day in 78% of the cases.
-- People over 60 are more likely to be monitored daily.

-- People under 18 are less likely to be monitored daily.

-- Those suspected of polydrug intoxication are most likely to be monitored closely, but people intoxicated on a drug other than alcohol are not likely to be closely monitored.

-- Ninety-two percent of those people given tranquilizers were monitored at least daily.

-- There are differences from center to center. Signs are monitored at intake only for 8% of the sample (41% in Mankato). They are monitored twice a day for 36% of the total sample (43% in St. Paul, 83% in Fairmont, and 36% in St. Cloud). Signs are monitored three or more times for 18% of the sample (53% in St. Cloud).

-- Lab test data are found in 16% of the files, especially in Mankato (52%--Mankato is a hospital-based detox center). Psychological test data are found in 8% of the files, especially in St. Cloud (19%--St. Cloud's center is adjacent to the Mental Health Center).

(C) Administering of medications.

-- For 41%, no medications were given (or recorded).

-- For 26%, various types of medications were given, typically insulin, blood pressure medications, antibiotics, and anti-convulsants.

-- For 25%, Valium or Librium was given. Tranquilizers are a recognized agent for managing withdrawal. Table shows the proportion of different subgroups of detox clients receiving tranquilizers, as recorded.
TABLE 12

VITAL SIGNS MONITORED

22% ONCE DAILY
5% NOT RECORDED
7% AT INTAKE ONLY
7% LESS THAN ONCE DAILY
3% TWICE DAILY
2% MORE THAN 3 TIMES DAILY
18% 3 TIMES DAILY

BASED ON 395 PEOPLE SAMPLED OF TOTAL DETOX POPULATION

PROPORTION OF DIFFERENT SUBGROUPS MONITORED AT LEAST ONCE A DAY

<table>
<thead>
<tr>
<th>TOTAL DETOX POPULATION</th>
<th>18 YEARS OLD OR LESS</th>
<th>60 YEARS OLD OR OLDER</th>
<th>FEMALE</th>
<th>INTOXICATED, NEEDED HELP</th>
<th>NO PREVIOUS ADMITS TO DETOX</th>
<th>6 OR MORE ADMITS TO DETOX</th>
<th>PRIOR USE OF ANY RESIDENTIAL PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>307/390</td>
<td>17/24</td>
<td>49/57</td>
<td>59/72</td>
<td>115/142</td>
<td>170/217</td>
<td>36/46</td>
<td>143/171</td>
</tr>
</tbody>
</table>
Tranquilizers were given to 24% of those in detox.

For those who were heavily intoxicated at admission, 30% were given tranquilizers.

For those who were not intoxicated at admission, 23% were given tranquilizers. (Detox client directors report that tranquilizers are given to people experiencing seizures, or to people in withdrawal, or to people with previous prescriptions for tranquilizers.)

There are significant differences from center to center in the use of tranquilizers. Tranquilizers were given to 8% in St. Cloud, 21% in St. Paul, 25% in New Ulm, 28% in Mankato, 36% in Fairmont, and 61% in Brainerd (as recorded in clients' files).

Of those given medication, 36% were on the basis of a physician's standing order, 29% by special order, 22% at an R.N.'s discretion, and 14% at the discretion of other detox staff.
QUESTION: What activities or programming do clients participate in while in the detox center?

ANSWER: Rule 32 does not specify whether any activities, or forms of programming, shall be offered. Different centers structure the clients' day differently. Results are shown in Table 14.

Data came from follow-up interviews at two weeks and three months (n=382 to 391).

-- Lectures, films, or discussions on chemicals or chemical dependency were offered in St. Paul, Brainerd, and St. Cloud, although not all clients went. Seventy-three percent of all participants were in St. Paul.

-- Ninety-five percent of AA group participants were in St. Paul.

-- In summary, 60% to 70% of the sample said they benefited from most activities. Lower than average ratings were given to "talks with physician or nurse" (except in Mankato, with 53% "benefiting"). Higher than average ratings were given to "involvement by community organizations." Most of this involvement occurred in St. Paul, by representatives of chemical dependency programs for Blacks and Indians.

-- When asked for specific recommendations on how to improve detox services, the largest single response was to "have more activities."
### TABLE 14. REACTIONS TO DIFFERENT ACTIVITIES IN THE DETOX CENTER

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percent Participating</th>
<th>Percent Benefiting (Of Participators)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lectures, films, or discussions on chemical dependency</td>
<td>61</td>
<td>62</td>
</tr>
<tr>
<td>AA groups</td>
<td>44</td>
<td>64</td>
</tr>
<tr>
<td>Medical involvement</td>
<td>23*</td>
<td>59</td>
</tr>
<tr>
<td>Family involvement</td>
<td>23</td>
<td>59</td>
</tr>
<tr>
<td>Employer involvement</td>
<td>8</td>
<td>64</td>
</tr>
<tr>
<td>Talks with counselor**</td>
<td>62</td>
<td>59</td>
</tr>
<tr>
<td>Interviews with detox staff**</td>
<td>75</td>
<td>69</td>
</tr>
<tr>
<td>Talking with other clients</td>
<td>78</td>
<td>62</td>
</tr>
<tr>
<td>Involvement with representatives from community or neighborhood groups</td>
<td>8</td>
<td>88</td>
</tr>
</tbody>
</table>

N=382 to 392

* This is probably an underestimate, since in some centers medical staff are not identified as such.

** In many centers, detox staff are also counselors.
QUESTION: Were the purposes of the detoxification center explained to the clients?

ANSWER: Rule 32 states that the "staff has the responsibility to see that the client...clearly understands the treatment suggested for the client, the alternatives to the treatment, and probable significant consequences to the client resulting from treatment."

The question was asked at follow-up, "Were the purposes of the detox center explained to you?" (n=393)

-- Seventy-four percent said "Yes"

-- Ten percent said "No"

-- Fifteen percent said they were already familiar with the purposes of the detox center.

-- There are differences in the above rates among the different centers. St. Paul, with 47% of the sample, had 78% of those saying "no."
QUESTION: Were clients' rights explained?

ANSWER: Rule 32 states that the "director shall ensure that staff openly discuss clients' rights and responsibilities with the client, either individually and/or in a group. In some cases, client understanding will demand special effort on the part of the staff. Rights and responsibilities are to be posted and updated regularly by the director."

The question was asked at follow-up, "Were you rights as a detox patient explained to you?" (n=392)

-- Seventy-six percent said "Yes"

-- Eleven percent said "No"

-- Eleven percent said they were already familiar with their rights.

-- St. Paul, with 47% of the sample, and 77% of those saying "no"

QUESTION: Were clients' rights respected?

ANSWER: The question was asked at follow-up, "Were your rights respected?" (n=392)

-- Ninety-six percent said "Yes"

-- Four percent said "No"
QUESTION: Were detox clients reasonably comfortable?

ANSWER: Clients were asked at follow-up, "During your stay at detox, were you reasonably comfortable?"

-- Ninety-two percent said "Yes"

-- Eight percent said "No"

-- There were significant differences from center to center. St. Paul, with 47% of the sample, had 83% of those saying "no." The entire sample at New Ulm (n=16) and Brainerd (n=32) said "yes."

QUESTION: Was the food adequate?

ANSWER: Clients were asked at follow-up, "During your stay at detox, was the food adequate?"

-- Eighty-four percent said "Yes"

-- Twelve percent said "No"

-- Four percent declined to eat

-- Here too there are differences between centers. In St. Paul, 20% said the food was not adequate. In Mankato, 11% said they declined to eat.
QUESTION: In what ways are family members, or "significant others," involved in the program?

ANSWER: Client files were examined for notations about such involvement. The results are shown in Table 15.

-- In over half (52%) of the cases, there is no mention of whether or not family members or significant others were involved.

-- In 32% of the cases, there is mention that the family or a significant other was involved either in talks with the staff, in the assessment of the client, or in making arrangements for the client upon leaving detox.

-- In 13% of the cases, there is mention that no significant other was involved in the detox program.

-- Clients 18 or younger were much more likely to have a significant other involved in the detox program.
**TABLE 15**

**IN VolVEMENT OF A "SIGNIFICANT OTHER" IN THE DETOX PROGRAM**

- 12% Involved in Assessment
- 55% Not Started
- 9% Not Involved
- 2% No Family Nearby
- 2% Other
- 9% Talks with Staff
- 1% Refuses to Deal
- 11% Participated in Arrangements

Based on 395 people sampled of total detox population.

**PROPORTION OF DIFFERENT SUBGROUPS WITH "SIGNIFICANT OTHER" INVOLVED**

- 12% / 45
- 15/21
- 18/57
- 23/72
- 37/142
- 85/219
- 51
- 9/46
- 41/72

Total detox population
15 years old or less
60 years old or older
Female
Intoxicated, needed help
No previous admits to detox
6 or more admits to detox
Prior use of any residential program.
QUESTION: In what condition were people when they left detox?

ANSWER: (A) One question at follow-up was, "When you left detox, how were you feeling physically? (n=390)

-- Seventy-one percent said they felt good, fine, or OK. This response varied from 52% in Brainerd and St. Cloud, to 68%-78% in Mankato, St. Paul, and New Ulm, and 90% in Fairmont.

-- Twenty-three percent said they felt weak or tired. There were higher than average percentages saying they felt "weak or tired" at Brainerd and St. Cloud.

-- Three percent said they felt sick.

(B) Another question was, "When you left detox, how were you feeling emotionally?" (n=291)

-- Forty-five percent said they felt good, fine, or OK. This ranged from 18% in St. Cloud, to 30% in Brainerd, 42% in Fairmont, 53%-54% in St. Paul, Mankato, and New Ulm.

-- Sixteen percent said they felt nervous, scared, or confused. This was claimed by 6% to 12% in New Ulm, St. St. Paul, and Brainerd, and 21% to 23% in Fairmont and St. Cloud.

-- Seventeen percent said they felt relieved to be discharged.

-- Four percent said they felt relieved to get help.
QUESTION: On what information does detox base a referral?

ANSWER: Client files were searched to see what diagnostic data was recorded. Table 16 presents the results, and highlights whether a formal chemical dependency assessment is on file for the total sample and for different subgroups.

-- A formal chemical dependency assessment was found in 63% of the files (and not found in 37%). This varies from 30% in Brainerd to 97% in Fairmont.

-- The different subgroups examined are equally likely to have a chemical dependency assessment on file.
QUESTION: (A) How many people are referred to residential chemical dependency programs?
(B) How many pursue the referral?

ANSWER: (A) There are two sources of data: case file and follow-up.

--- Thirty-two percent are referred to residential programs, according to case files.

--- Thirty-six percent are referred to residential programs, according to self-report. (Computer print-outs for self-report data were more conducive to the following breakdowns.)

--- Of the referrals to residential programs, 48% were to primary residential programs, 36% were to State Hospitals, 7% were to halfway houses, 2% were to nursing homes ("extended care"), 7% were unidentified residential programs.

--- Residential referrals were made for 58% of the clients at Fairmont, 43% at St. Cloud, 33% to 34% at St. Paul, Mankato, and Brainerd, and 15% at New Ulm.

(B) The status of referral was asked at follow-up (n=369)

--- Thirty-three percent did not pursue the referral.

--- Forty-two percent completed the residential program (14% of the entire detox population).

--- Thirteen percent began the program but left before completion.
- Seven percent were still receiving services at the time of follow-up.

- Two percent hadn't yet entered the program.

- Fairmont had a higher-than-average proportion of people completing a residential program.

- St. Paul had a higher than average proportion of people leaving residential programs before completion.
QUESTION: What factors influence whether a person gets a referral to residential chemical dependency services?

ANSWER: Overall, 32% receive a referral to a chemical dependency residential program, as recorded in case files. Residential programs include primary treatment, State Hospitals, and halfway houses.

(A) Demographic characteristics

-- The 19 to 29 age group is less likely (23%) than average to get a referral, and the 40 to 59 age group is more likely (38%) than average to get a residential referral.

-- Males and females are equally likely to get a residential referral.

-- Married people are more likely (40%) than average to get a residential referral.

(B) History of chemical dependency services

-- Number of previous visits to detox does not effect the chances of getting a residential referral.

-- Number of previous stays in treatment does not effect the chances of getting a residential referral.

(C) Degree of intoxication

-- Fifty-two percent of those not intoxicated at admission get a referral.

-- Twenty-two percent of the "heavily intoxicated, needing help" received a referral.
(D) Family involvement in the program

-- How the family is involved in the detox program substantially effects the probability of getting a referral.

-- Those with no family nearby are most likely to get a referral (71%).

-- Those with family involved are more likely to get a residential referral (51%) than those with family not involved (24%).

(E) "Holding" practices

-- Those held on medical authority are very likely to get a referral (63%).

-- Those held on no authority are as likely as those not held on hold to get a referral.
QUESTION: How many detox clients are referred to AA?

ANSWER: Data came from case files and clients' self-report.

-- Forty-three percent are referred to AA according to case files; 42% are referred to AA according to self-report.

-- Referrals to AA are approximately the same at each center.

QUESTION: How many pursued the referral to AA?

ANSWER: The status of this referral was asked at follow-up.

-- Forty-one percent didn't pursue the referral.

-- Forty-five percent went to AA and say they will continue to go.

-- Seven percent went to AA and quit going.
QUESTION: (A) How many people are referred to non-residential programs?  
(B) How many pursue the referral?

ANSWER: (A) Data came from clients' self-report (n=391).

-- Eighteen percent are referred to a non-residential program.

-- Sixty-five percent of those referred to a non-residential program (and 12% of the total sample) are referred to the Mental Health Center/Human Service Board or the county counselor.

-- Other non-residential referrals include growth group, "counseling elsewhere," marital counseling, and mostly unidentified others. While "Governor's Bill" (early intervention) programs are not mentioned per se, they do not seem to be used as a referral source.

-- Non-residential referrals were made for 38% of New Ulm's clients, 30% of Mankato's clients, 25% of St. Cloud's and Fairmont's clients, 15% of Brainerd's clients, and 10% of St. Paul's clients.

(B) The status of the referral was asked at follow-up.

-- Twenty-two percent did not pursue the referral.

-- Twenty percent had completed a non-residential program.

-- Seven percent had begun, but left the program before completion.

-- Thirty-three percent were still receiving services at the time of the follow-up interview.
-- St. Cloud had a higher than average number of clients not pursuing the referral; Mankato had a higher than average number accepting a non-residential referral.
QUESTION: What have people learned about their chemical use, while in detox, or since being in detox?

ANSWER: People were asked if they had become more aware of a) their own use habits or patterns of using other drugs (n=263), and b) how problems in their lives might be related to the way they use alcohol or other drugs (n=266). These were asked in the three-month interview only.

-- Sixty-nine percent said that they had become more aware of their own use habits or patterns (31% said they had not). This proportion was similar from center to center.

-- Sixty-five percent said that they had become more aware of how problems in their lives might be related to the way they use alcohol or other drugs (35% said they had not). The different centers again showed similar results.

People were also asked if their use had become more responsible (less dangerous or bothersome to others or themselves) since detox.

-- Forty-four percent said "Yes"

-- Eighteen percent said "No"

-- Thirty-eight percent said they were no longer using.

-- Most of those who said their use had become more responsible described the change as "reduced use."
QUESTION: Have detox clients reduced their use of alcohol and other drugs?

ANSWER: Questions concerning the frequency of use, and change in frequency, were asked in the three month interview about a variety of chemicals. The time frame is "...in the last month." Results are shown in Table 17.

-- At follow-up, 49% of the sample said they had not used alcohol in the previous month (three month interview).

-- There were significant differences from center to center in the proportion of their clients who were using less alcohol at follow-up, ranging from New Ulm and St. Paul (74% using less) to Mankato and Fairmont (90% using less). St. Cloud clients showed the highest non-use rate (60%), New Ulm the lowest (27%).

-- There were no reliable differences with respect to other drug use.
TABLE 17. LEVEL OF AND CHANGES IN CHEMICAL USE (THREE MONTH INTERVIEW)

<table>
<thead>
<tr>
<th></th>
<th>Rate of Use for Month Prior to Interview</th>
<th>Change in Use Since Detox</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less</td>
<td>More</td>
</tr>
<tr>
<td></td>
<td>Not</td>
<td>Than</td>
</tr>
<tr>
<td></td>
<td>Than</td>
<td>Before</td>
</tr>
<tr>
<td></td>
<td>At</td>
<td>Before</td>
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<tr>
<td></td>
<td>Once/</td>
<td>Before</td>
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<td></td>
<td>Days/</td>
<td>Before</td>
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<tr>
<td></td>
<td>Days/</td>
<td>Before</td>
</tr>
<tr>
<td></td>
<td>Irregular</td>
<td>Before</td>
</tr>
<tr>
<td>Alcohol</td>
<td>49</td>
<td>6</td>
</tr>
<tr>
<td>Marijuana</td>
<td>88</td>
<td>2</td>
</tr>
<tr>
<td>Barbiturates</td>
<td>99</td>
<td>--</td>
</tr>
<tr>
<td>Amphetamines</td>
<td>99</td>
<td>--</td>
</tr>
<tr>
<td>Tranquilizers</td>
<td>94</td>
<td>3</td>
</tr>
<tr>
<td>Pain Killers</td>
<td>99</td>
<td>--</td>
</tr>
<tr>
<td>Opiates</td>
<td>100</td>
<td>--</td>
</tr>
<tr>
<td>Hallucinogens</td>
<td>100</td>
<td>--</td>
</tr>
<tr>
<td>Cociane</td>
<td>99</td>
<td>1</td>
</tr>
<tr>
<td>Inhalants</td>
<td>99</td>
<td>--</td>
</tr>
<tr>
<td>Over-the-counter</td>
<td>98</td>
<td>1.5</td>
</tr>
<tr>
<td>Cigarettes</td>
<td>(Does not apply)</td>
<td>15</td>
</tr>
<tr>
<td>Caffeine</td>
<td>(Does not apply)</td>
<td>28</td>
</tr>
</tbody>
</table>

N=267 (Group interviewed at three months)
QUESTION: How do clients describe change in different life areas, since being in the detox center?

ANSWER: The next 10 pages summarize results of self-assessments in several areas.
QUESTION: How did clients rate their health three months following discharge from detox?

ANSWER: Two kinds of ratings were asked for:

(A) How would you rate your health at present?

<table>
<thead>
<tr>
<th>Rating</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>23%</td>
</tr>
<tr>
<td>Good</td>
<td>56%</td>
</tr>
<tr>
<td>Fair</td>
<td>17%</td>
</tr>
<tr>
<td>Poor</td>
<td>4%</td>
</tr>
</tbody>
</table>

N=226

-- There are no differences from center to center

-- Repeaters to detox rate their health at the same level as first-timers do

(B) Is this better, the same, or worse than before detox?

<table>
<thead>
<tr>
<th>Rating</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Much better</td>
<td>15%</td>
</tr>
<tr>
<td>Somewhat better</td>
<td>32%</td>
</tr>
<tr>
<td>Same</td>
<td>49%</td>
</tr>
<tr>
<td>Somewhat worse</td>
<td>3%</td>
</tr>
<tr>
<td>Much worse</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

N=267

-- Frequently mentioned descriptors of "better" are:
"less pain, tension, nervousness"
"feel healthier"
"better health habits"
"fewer physical problems"
"more energy"

-- People who completed a residential program during the course of this study report significantly more change for the better than those who did not complete a residential program.
QUESTION: How did clients rate their emotional health three months following discharge from detox?

ANSWER: Two kinds of ratings were asked for:

(A) How would you rate your mood, or spirits, or peace of mind at present?

<table>
<thead>
<tr>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>21%</td>
<td>56%</td>
<td>18%</td>
<td>6%</td>
</tr>
</tbody>
</table>

N=267

-- There were no differences from center to center.

(B) Is this better, the same, or worse than before?

<table>
<thead>
<tr>
<th>Much better</th>
<th>Somewhat better</th>
<th>Same</th>
<th>Somewhat worse</th>
<th>Much worse</th>
</tr>
</thead>
<tbody>
<tr>
<td>30%</td>
<td>29%</td>
<td>36%</td>
<td>4%</td>
<td>1%</td>
</tr>
</tbody>
</table>

N=267

-- Brainerd clients showed less than average change for the better. Mankato clients showed more than average change for the better.

-- For those rating it "better," the follow were offered as descriptive of "better":
...41% said "better outlook"
...22% said "less angry, guilty, depressed"
...21% said "happier, feel better, friendlier"

-- For those rating it "better," the following were responses to "What did you do to make it better?" (n=153)
...27% said they "quit using"
...18% said they "participated in a chemical dependency program"
...7% said they "cut down, or changed use-related behavior"

-- People who completed a residential program during the course of the study (or are still participating at follow-up), show more positive change on this rating than people for whom no referral was made.
QUESTION: How did clients rate their family life three months following discharge from detox?

ANSWER: Two kinds of ratings were asked for:

(A) How would you rate your family life?

<table>
<thead>
<tr>
<th>Rating</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>16%</td>
</tr>
<tr>
<td>Good</td>
<td>52%</td>
</tr>
<tr>
<td>Fair</td>
<td>19%</td>
</tr>
<tr>
<td>Poor</td>
<td>13%</td>
</tr>
</tbody>
</table>

N=264

-- Clients in Fairmont, Brainerd, and St. Cloud gave lower than average ratings of family life

-- Repeaters to detox rate their family life at the same level as first timers do

(B) Is your family life better, the same, or worse?

<table>
<thead>
<tr>
<th>Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Much better</td>
<td>20%</td>
</tr>
<tr>
<td>Somewhat better</td>
<td>29%</td>
</tr>
<tr>
<td>Same</td>
<td>46%</td>
</tr>
<tr>
<td>Somewhat worse</td>
<td>3%</td>
</tr>
<tr>
<td>Much worse</td>
<td>2%</td>
</tr>
</tbody>
</table>

N=265

-- Frequently mentioned descriptions of "better" are:
  ..."less arguments, get along better"
  ..."communicate better, talk more"
  ..."more understanding"
  ..."do more together"

-- People who completed a residential program during the course of the study, and people who were referred to treatment but didn't go, gave higher than average ratings of change
QUESTION: How did clients rate their social life three months following discharge from detox?

ANSWER: Two kinds of ratings were asked for:

(A) How would you rate the quality of your social life at present?

<table>
<thead>
<tr>
<th>Rating</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>11%</td>
</tr>
<tr>
<td>Good</td>
<td>50%</td>
</tr>
<tr>
<td>Fair</td>
<td>28%</td>
</tr>
<tr>
<td>Poor</td>
<td>11%</td>
</tr>
</tbody>
</table>

N=267

-- There were no differences from center to center

-- Repeaters to detox rate their social life at the same levels as first timers do

(B) Is this better, the same, or worse than before detox?

<table>
<thead>
<tr>
<th>Comparison</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Much better</td>
<td>10%</td>
</tr>
<tr>
<td>Somewhat better</td>
<td>26%</td>
</tr>
<tr>
<td>Same</td>
<td>58%</td>
</tr>
<tr>
<td>Somewhat worse</td>
<td>6%</td>
</tr>
<tr>
<td>Much worse</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

N=267

-- There were no differences from center to center

-- In response to "What have you done to make it better?"
  ...26% said "changed or stopped use"
  ...37% said "more active"
  ...11% said "involved in AA"
  ...11% said "new friends"

-- People completing a residential program during this study gave higher than average change for the better on the social life rating.
QUESTION: How did clients rate their employment three months following discharge from detox?

ANSWER: Two kinds of ratings were asked for:

(A) How would you rate your present employment situation?

<table>
<thead>
<tr>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>21%</td>
<td>44%</td>
<td>9%</td>
<td>26%</td>
</tr>
</tbody>
</table>

N=232

-- Most of the people saying "excellent" are in St. Paul.

-- Is the number of admissions to detox goes up, the rating of one's present employment situation does down.

(B) Is this better, the same, or worse since before detox?

<table>
<thead>
<tr>
<th>Much better</th>
<th>Somewhat better</th>
<th>Same</th>
<th>Somewhat worse</th>
<th>Much worse</th>
</tr>
</thead>
<tbody>
<tr>
<td>13%</td>
<td>18%</td>
<td>58%</td>
<td>8%</td>
<td>4%</td>
</tr>
</tbody>
</table>

N=244

-- St. Paul shows large numbers saying it's "better," and large number saying it's "worse."

-- Of those saying it's "better,"
  ...23% cite "higher energy"
  ...19% cite "promoted, better job"
  ...15% cite "found a job"
  ...14% cite "more reliable"

-- This rating is the same for people who went to a residential program during this study as for people who did not.
QUESTION: How did clients rate their financial situation three months following discharge from detox?

ANSWER: Two kinds of ratings were asked for:

(A) How you rate your financial situation?

<table>
<thead>
<tr>
<th>Rating</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>7%</td>
</tr>
<tr>
<td>Good</td>
<td>34%</td>
</tr>
<tr>
<td>Fair</td>
<td>30%</td>
</tr>
<tr>
<td>Poor</td>
<td>29%</td>
</tr>
</tbody>
</table>

N=268

-- There were no differences from center to center.

-- Repeaters to detox rate their financial situation at the same level as first-timers.

(B) Is this better, the same, or worse?

<table>
<thead>
<tr>
<th>Change</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Much better</td>
<td>6%</td>
</tr>
<tr>
<td>Somewhat better</td>
<td>19%</td>
</tr>
<tr>
<td>Same</td>
<td>63%</td>
</tr>
<tr>
<td>Somewhat worse</td>
<td>9%</td>
</tr>
<tr>
<td>Much worse</td>
<td>3%</td>
</tr>
</tbody>
</table>

N=264

-- There were no differences from center to center.

-- For those rating it "better," what did you do to make it better? (n=63)

...32% said "found employment; work more"

...21% said "spend less money on alcohol or other drugs"

...21% said "budget money better"

-- Change in financial situation was not effected by whether a person did or did not go to a residential program during this study.
QUESTION: How did clients rate their present situation, overall, three months following discharge from detox?

ANSWER: Two kinds of ratings were asked for:

(A) "In summary, when you look over all the different areas of your life combined, how would you rate how you're doing now?"

<table>
<thead>
<tr>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>19%</td>
<td>55%</td>
<td>21%</td>
<td>6%</td>
</tr>
</tbody>
</table>

N=268

-- Repeaters to detox give the same ratings as first-timers do.
-- There were no differences from center to center.

(B) Is this better, the same, or worse than before detox?

<table>
<thead>
<tr>
<th>Much better</th>
<th>Somewhat better</th>
<th>Same</th>
<th>Somewhat worse</th>
<th>Much worse</th>
</tr>
</thead>
<tbody>
<tr>
<td>34%</td>
<td>32%</td>
<td>30%</td>
<td>3%</td>
<td>2%</td>
</tr>
</tbody>
</table>

-- Mankato showed a higher than average percentage (54%) of "much better." Brainerd showed a higher than average percentage (14%) of "somewhat worse."
-- People who complete a treatment program during the course of the study are more likely to say that overall things are much better (52%), than are people who did not complete a residential program (29%).
<table>
<thead>
<tr>
<th>Area</th>
<th>Much Better</th>
<th>Somewhat Better</th>
<th>Same</th>
<th>Somewhat Worse</th>
<th>Much Worse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>15%</td>
<td>32%</td>
<td>49%</td>
<td>3%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Emotional</td>
<td>30%</td>
<td>29%</td>
<td>36%</td>
<td>4%</td>
<td>1%</td>
</tr>
<tr>
<td>Family</td>
<td>20%</td>
<td>29%</td>
<td>46%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Social</td>
<td>10%</td>
<td>26%</td>
<td>58%</td>
<td>6%</td>
<td>0.4%</td>
</tr>
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<td>Employment</td>
<td>13%</td>
<td>18%</td>
<td>58%</td>
<td>8%</td>
<td>4%</td>
</tr>
<tr>
<td>Financial</td>
<td>6%</td>
<td>19%</td>
<td>63%</td>
<td>9%</td>
<td>3%</td>
</tr>
<tr>
<td>&quot;Overall&quot;</td>
<td>34%</td>
<td>32%</td>
<td>30%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Area</td>
<td>Excellent</td>
<td>Good</td>
<td>Fair</td>
<td>Poor</td>
<td></td>
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<td></td>
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<tr>
<td>Health</td>
<td>23%</td>
<td>56%</td>
<td>17%</td>
<td>4%</td>
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<tr>
<td>Emotional</td>
<td>21%</td>
<td>56%</td>
<td>18%</td>
<td>6%</td>
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</tr>
<tr>
<td>Family</td>
<td>16%</td>
<td>52%</td>
<td>19%</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>11%</td>
<td>50%</td>
<td>28%</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td>21%</td>
<td>44%</td>
<td>9%</td>
<td>26%</td>
<td></td>
</tr>
<tr>
<td>Financial</td>
<td>7%</td>
<td>34%</td>
<td>30%</td>
<td>29%</td>
<td></td>
</tr>
<tr>
<td>&quot;Overall&quot;</td>
<td>19%</td>
<td>55%</td>
<td>21%</td>
<td>6%</td>
<td></td>
</tr>
</tbody>
</table>

75
QUESTION: How long do people stay "dry" after being discharged from detox?

ANSWER: The question was asked, "How soon after getting out of detox did you start drinking or using other drugs?"

NOTE: This question was asked in the two-week interview only (n=248), so it excludes those people who 1) went to treatment, and 2) could not be found to complete the two week interview, even though they had agreed to be a part of the survey.

-- Twelve percent used the same day they got out.

-- Thirty-six percent began to use one to seven days after discharge.

-- Eleven percent began to use eight to 14 days after discharge.

-- Six percent began to use 15 or more days after discharge.

-- Thirty-six percent had not used since discharge.

QUESTION: How frequently do people get drunk after discharge?

ANSWER: The question was asked at three months following discharge from detox, "In the last month, have you gotten drunk, high, or loaded from using alcohol or other drugs?"

-- Sixty-two percent said they had not gotten drunk in the last month.

-- Twenty-two percent said they had gotten drunk one to two times.
Eight percent said they had gotten drunk three to four times.

Three percent said they had gotten drunk five to nine times.

Five percent said they had gotten drunk ten or more times.
QUESTION: Do people return to detox?

ANSWER: In the two-week and three-month interviews, clients were asked whether they had been in detox again. (For those people interviewed on both occasion, three-month response was recorded.)

-- 85% had not been back to detox during the three-month course of the study

-- 15% had returned to detox
  -- 12% had been back to detox once
  -- 3% had been in detox two or more times
QUESTION: What factors are related to a return to detox?

ANSWER: Clients were asked if they had been in detox again. For half the sample, the question was asked in the two-week interview, and for the other half, the question was asked in the three-month interview. Answers were cross-tabulated with several other questions.

A return to detox during this study was associated (statistically significant) with...

...how the person was originally brought to detox. People who came in alone ("self-referral") were more likely to return to detox (26%) than those who were originally brought in by police (12%). Remember that police tend to bring in the first-timers, and people who come in alone tend to have been there before. Other referral sources showed approximately the same repeat rate (15%).

...previous admissions to detox. As the number of previous admissions increases, so does the likelihood of returning to detox. For those with no previous admissions, 6.8% returned during this study. For those with 6 or more previous admissions, 30% returned during this study.

...previous admissions to a residential program. Of those with no prior treatment, 8.1% returned to detox. Of those with one previous stay in treatment, 16% returned to detox. Of those with two or more stays in treatment, 29% returned to detox.

...whether a referral was made to a residential program. If a referral was made (regardless of whether or not the person pursued the referral, 9% returned to detox during this study. If a referral was not made, 17% returned.
...whether a referral was made to AA (regardless of whether the person went). For those with an AA referral 13% returned during the study. For those with no AA referral 17% returned.

...whether a person says that he/she finds it difficult to stop drinking before becoming completely drunk. For those who characterize themselves this way, 19% returned to detox; for those who did not, 10% returned to detox.

(People who say this about themselves are more than twice as likely to be regular attenders at AA than people who don't say this. They are also much more likely to have been to two or more residential programs.)

...with whom one lives. For those living with family, 11% return to detox; for those living alone, or living "with others," 19% return to detox.

...which detox center one goes to. Of those in Mankato (n=67), 24% returned. Of those in New Ulm (n=16), 19% returned. Of those in Brainerd (n=33), 15% returned. Of those in St. Cloud (n=63), 14% returned. Of those in St. Paul (n=185), 11% returned. Of those in Fairmont (n=31), 13% returned. Remember that these percentages are based on returns within a three-month period. This gives a different picture of return rates (because it's calculated from a different population) than one gets from asking each client as admission whether or not he or she had been in detox before.

A return to detox during the study was not associated with...

...referral to a non-residential program. Whether or not a referral to a non-residential program was made, 15% returned.
QUESTION: What difference does a referral to a residential chemical dependency program make?

ANSWER: The flow of clients from detox into the residential continuum of care, and back to detox, is depicted on Table 18.

-- For the total sample in this study, 14% said they returned to detox during the study period (for any one client, the period of the study was approximately 3 to 3½ months). This is probably an underestimate, since approximately one-third of the sample was interviewed at the two-week interval only.

-- The 14% who returned to detox during the study period had different experiences accessing the residential continuum of care. This is shown on Table by the four dark paths leaving from the right and returning to detox.

-- Of those completing a residential program, 7% (4 out of 56) returned to detox.

-- Of those beginning but not finishing a residential program, 15% (4 out of 26) returned to detox.

-- Of those referred to a residential program, but who never entered the program, 10% (5 out of 48) returned to detox.

-- Of those who were not referred to a residential program, 16% (39 out of 239) returned to detox.

CAUTION: The numbers in the above analysis are quite small, making large differences in percentages difficult to interpret.
QUESTION: How do people personally assess the benefits and disadvantages of using detox services?

ANSWER: At the three-month interview, the following two questions were asked:

(A) "Looking back, what good came out of being in detox?" (n=268)

- 20% "Nothing good"
- 34% "Gave me time to think, pull myself together, self-awareness"
- 16% "Stopped drinking, sobered up"
- 7% "Became aware help was available"
- 15% "Realized I needed help"
- 7% "Learned about alcohol"

(B) "Looking back, what bad came out of being in detox?" (n=267)

- 82% "Nothing bad"
- 4% "Problems with family"
- 14% Other
QUESTION: What changes would people make in detox services?

ANSWER: At the three-month interview, the following was asked: "What change would you make?" (n=256)

45% "None"
9% "Need more activities, and recreation"
9% "Better staff, better treatment of clients"
9% "Improve rules (e.g. wear own clothes)"
6% "Better food"
4% "More group counseling"
3% "Improve facility"
3% "Lock-up is bad"
60% "Other"
QUESTION: Is the follow-up interview helpful?

ANSWER: At three months, the following question was asked:

"Did the interview we did together several weeks ago do anything for you?"

72% "Helpful"
25% "Didn't do anything"
3.6% "Angry or depressed"
SUMMARY

Client Characteristics

The detox population show many signs of problems in their lives, and problems related to their chemical use. They have experienced employment and financial hardship, and social isolation and poor health. They have lost friends and family because of their use, and many report engaging in violent behavior.

Detox clients are involved primarily with alcohol, and large numbers of people respond to diagnostic questions in ways indicative of problematic use or chemical dependency. All of the above patterns are more pronounced for repeaters.

Almost half of the sample was new to detox, half had been in a residential program at least once before, and few had reportedly used non-residential chemical dependency services.

Client Reactions to Chemical Dependency Programming

A majority of the sample said they felt good at discharge, although more than 25% said they do not either physically or emotionally. Sixty to 70% felt they had benefited by the various experiences in detox. Many did not, and many had little contact with programming. Some spoke of negative aspects: The purposes of the detox were not explained, they were not made aware of their rights, the food was not good, and they were not comfortable. Some cited indignation or embarrassment at having to wear pajamas, or sharing facilities with members of the opposite sex.

Referral Practices

Thirty-two percent were referred to a residential program; of these, 42% completed the program (this means that 14% of this sample completed a residential program). Thirty-three percent were given a referral but did not pursue it.
Several factors are likely to influence whether a person gets a referral to a residential program: Age, marital status, degree of intoxication, and family involvement.

Forty-three percent of the sample got a referral to AA; of those, 52% pursued the referral.

Eighteen percent were referred to a non-residential program (mostly counseling at the mental health center). Sixty percent received services, 22% did not pursue the referral.

Changes in Use of Alcohol and Other Drugs

Three months following discharge, 49% of the follow-up sample claimed not to be drinking in the month prior to the interview, and 62% said they had not gotten drunk. Eighty percent claimed that their present use of alcohol was less than before, or said that they were not using at all. Twenty percent were drinking as much as before or more. Other intoxicants which were not used often by clients before admission, were still not being used frequently.

A large majority (65-70%) said their detox experience made them more aware of their own use habits and how problems are related to those habits. Forty-four percent claimed that they were now using in a way less dangerous or bothersome to themselves or others.

In the sample interviewed two weeks after discharge, 12% said they drank alcohol the same day they got out of detox. An additional 36% said they used alcohol within a week of discharge.

Fourteen to 15% of the interviewed group returned to detox within the study period.
Changes in Clients' Lives

At three months, interviewers asked for a description of what changed in several different areas of clients' lives. Fifteen percent said their health was much better, and 30% said their emotional health was much better. Clients often attributed these changes to changes in chemical use, and/or said they were now less angry, guilty, or depressed and had a better outlook. Emotional health and physical health were each rated higher by those who completed a residential program.

Family life was rated much better by 20%—again, these ratings are higher for those completing a residential program. Social life was rated much better by 10%, but this was not affected by completion of a residential program.

Thirteen percent said their employment situation is much better, often because people had found a new or better job, or because they had more energy. Six percent said their financial situation is now much better, mostly because their employment status had improved or because they were budgeting money more wisely. Neither employment or financial areas had been affected by participation in a residential program at the time of the three-month follow-up.

When asked to give an overall rating, 34% said their situation was now much better. People who completed residential programs after detox gave significantly higher ratings on this question.

Benefits of This Type of Study

A large majority (72%) of people interviewed three months following discharge said that the interview conducted at two weeks was helpful. Less than 4% cited adverse reactions.

The study produced a large amount of data about detox clients, services, and outcomes of detox programming, only some of which is reported here.
This report reflects those analyses thought most responsive to the purposes of the study. Much was learned about which lines of questioning and analysis were more fruitful than others, so that a more simplified procedure can be designed in the future.
IMPLICATIONS OF THE STUDY

The following observations may be given based on the analysis conducted to date.

1. There is a high incidence of repeated use of detoxification services. Some of this repeated use of detox may be related to prevailing intervention and treatment practices that do not consider the larger contexts of problem drinkers and chronic alcoholics. Detox centers, especially when they are the only chemical dependency resources in a community, provide a good opportunity for timely support and intervention. Almost half the clientele at a given time are at the detox center for the first time, and are in a state of discomfort and perhaps crisis. For these people, family, friends, and employers are often still intact and can be engaged in a more effective way.

Detox centers contain a variety of people. Alternative services that recognize the special needs of the varied types of detox users should be developed and aggressively pursued as resources. Services should be developed that a) are educational, and supportive of finding ways to develop a healthier style around the use of alcohol and other drugs; b) draw more on the strengths of detox clients, in a way that actively involve the persons's own natural support systems (family, friends, employer); c) recognize that not everyone wants to change. There is a lifestyle that includes use of detox primarily as a place to dry out, get warm, and get needed medical, personal, and social attention; perhaps less costly alternatives to detox centers can be developed for some of these needs; d) encourage staff to be attuned to these different subgroups. While detox staff are typically compassionate and caring people, they do not often represent the variety of people needing detox and intoxication services. Too often, their message is limited to their own experiences with recovery. Also, the frustrations felt by staff in working with chronic repeaters, can easily lead to treating everyone in a similar manner.
A return to detox can be predicted for people with a history of detox admissions and treatment admissions. This strongly suggests that residential treatment programs should develop more effective strategies for their clients who came to them from the detox center.

2. While an assessment of medical practices was not a primary objective of this study, data from clients' files and from clients themselves revealed that the medical management of detoxification varies considerably from center to center, with observed consequences in quality of care and client outcomes. Detox clients are probably not as healthy as the general population, and while in the detox center many people do get needed medical attention.

However, the way medications, especially tranquilizers, are administered deserves scrutiny. While tranquilizers definitely have a legitimate role in the management of withdrawal, it is striking that prescription practices vary so widely; between 8% and 61% are given tranquilizers, depending on locale. Furthermore, decisions about appropriate medical care should be supported with routine observation of clients' pulse, blood pressure, respiration, and temperature; too often, these basic observations are not entered into clients' files, making staff decisions less than fully-informed. While no definitive link to medical practice can be made, it is noteworthy that 23% of those interviewed said they felt weak, tired, or sick at discharge, and 16% said they felt nervous, scared, or confused. It is in the medical and diagnostic area that clients' records are most deficient.

3. There are inconsistent interpretations of the 72-hour hold authority, its application and documentation. While the Hospitalization and Commitment Act (Minnesota Statutes, Chapter 253A) does give authority for a "licensed or approved program equipped to treat drug dependent persons" to hold an intoxicated person for up to 72 hours (exclusive of weekends and holidays), certain conditions must be met: the person must be intoxicated in public; application for admission shall be made by a peace or healthy officer; and the application shall contain a
statement given by the peace or health officer stating the circumstances under which the person was taken into custody and the reasons therefor. While the law does not specifically state that the above statements be in writing, there is no evidence in clients' files that the legal conditions had been met, for 70% of those people allegedly on 72-hour hold. There is a risk of violation of patient rights and civil liberties under current practices.
APPENDIX A

RECORD-KEEPING PRACTICES IN DETOX CENTERS
APPENDIX A: RECORDKEEPING PRACTICES IN DETOX CENTERS

Comprehensive and complete records are essential to document client care and to protect programs from liability. The Department of Public Welfare requires recording of client demographic information and client flow summaries to support appropriation requests and to monitor client use of detox services. Detox centers are furnished with forms for reporting client information; however, many files examined in this study did not contain a copy of this form. Therefore, other detox notes and records were used to supply descriptions of clients and circumstances surrounding admission. The purposes for reporting the extent of missing information is to assist detox programs in identifying areas for improvement in client records.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PERCENT OF CASES W/ITEM MISSING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0</td>
</tr>
<tr>
<td>Sex</td>
<td>0.2%</td>
</tr>
<tr>
<td>Race</td>
<td>10.9%</td>
</tr>
<tr>
<td>Marital Status</td>
<td>8.9%</td>
</tr>
<tr>
<td>Involvement of a Significant Other</td>
<td>55.4%</td>
</tr>
<tr>
<td>Employment Status</td>
<td>13.2%</td>
</tr>
<tr>
<td>Reason for No Employment</td>
<td>32.9%</td>
</tr>
<tr>
<td>Involvement of Employer</td>
<td>44.1%</td>
</tr>
<tr>
<td>Drug Used Prior to Admit</td>
<td>10.1%</td>
</tr>
<tr>
<td>Degree of Intoxication at Admit</td>
<td>15.4%</td>
</tr>
<tr>
<td>Other Signs at Intake</td>
<td>22.0%</td>
</tr>
<tr>
<td>Personal Client History</td>
<td>7.8%</td>
</tr>
<tr>
<td>Staff Impressions</td>
<td>18.2%</td>
</tr>
<tr>
<td>ITEM</td>
<td>PERCENT OF CASES W/ITEM MISSING</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Chemical Assessment</td>
<td>37.2%</td>
</tr>
<tr>
<td>State Information</td>
<td>63.3%</td>
</tr>
<tr>
<td>Lab Test Data</td>
<td>84.1%</td>
</tr>
<tr>
<td>Psychological or Psychiatric Data</td>
<td>92.4%</td>
</tr>
<tr>
<td>Recording of Vital Signs</td>
<td>12.4%</td>
</tr>
<tr>
<td>Written 72 Hour Hold</td>
<td>46.3%</td>
</tr>
<tr>
<td>Disposition at Discharge</td>
<td>2.3%</td>
</tr>
<tr>
<td>Services Client Used After Discharge</td>
<td>88.4%</td>
</tr>
</tbody>
</table>
APPENDIX B

AGREEMENT BETWEEN DETOX RECORDS AND CLIENT SELF-REPORT
APPENDIX B: AGREEMENT BETWEEN DETOX RECORDS AND CLIENT SELF-REPORT

Comparisons were made on the items for which there was comparable data.

1) How people were brought to detox.

<table>
<thead>
<tr>
<th>Case File (n=395)</th>
<th>Self-Report (n=391)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15% Came in alone</td>
<td>19%</td>
</tr>
<tr>
<td>13% Brought in by a friend</td>
<td>13%</td>
</tr>
<tr>
<td>47% Brought in by police</td>
<td>44%</td>
</tr>
<tr>
<td>12% Brought in by spouse or other relative</td>
<td>11%</td>
</tr>
</tbody>
</table>

2) Previous use of detox services.

<table>
<thead>
<tr>
<th>Case File (n=395)</th>
<th>Self-Report (n=395)</th>
</tr>
</thead>
<tbody>
<tr>
<td>55% Never before</td>
<td>68%</td>
</tr>
<tr>
<td>24% 1-2 times before</td>
<td>16%</td>
</tr>
<tr>
<td>9% 3-5 times before</td>
<td>6%</td>
</tr>
<tr>
<td>6% 6+ times before</td>
<td>11%</td>
</tr>
</tbody>
</table>

3) Previous use of residential services

<table>
<thead>
<tr>
<th>Case File (n=395)</th>
<th>Self-Report (n=390)</th>
</tr>
</thead>
<tbody>
<tr>
<td>56% Never been to a residential program</td>
<td>49%</td>
</tr>
<tr>
<td>44% Been in a residential program at least once</td>
<td>51%</td>
</tr>
</tbody>
</table>
4) Previous use of non-residential chemical dependency services

<table>
<thead>
<tr>
<th>Case File (n=395)</th>
<th>Self-Report (n=395)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2%</td>
<td>County counselor</td>
</tr>
<tr>
<td>8%</td>
<td>Counseling MHC/HSB</td>
</tr>
<tr>
<td>2%</td>
<td>Counseling elsewhere</td>
</tr>
<tr>
<td>1%</td>
<td>Growth group</td>
</tr>
<tr>
<td>1%</td>
<td>Marital counseling</td>
</tr>
<tr>
<td>2%</td>
<td>Other</td>
</tr>
</tbody>
</table>

5) Previous use of Alcoholics Anonymous

<table>
<thead>
<tr>
<th>Case File (n=395)</th>
<th>Self-Report (n=395)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2%</td>
<td>Regular attendance</td>
</tr>
<tr>
<td>25%</td>
<td>Irregular attendance</td>
</tr>
<tr>
<td>17%</td>
<td>Never attended</td>
</tr>
<tr>
<td>56%</td>
<td>Not recorded</td>
</tr>
</tbody>
</table>

6) Degree of intoxication at admission

<table>
<thead>
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<th>Case File (n=394)</th>
<th>Self-Report (n=392)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8%</td>
<td>Not intoxicated</td>
</tr>
<tr>
<td>41%</td>
<td>&quot;Intoxicated, under own power&quot;</td>
</tr>
<tr>
<td>36%</td>
<td>&quot;Intoxicated, needed help&quot;</td>
</tr>
<tr>
<td>N/A</td>
<td>&quot;Heavily intoxicated&quot;</td>
</tr>
<tr>
<td>N/A</td>
<td>&quot;Intoxicated, didn't need detox&quot;</td>
</tr>
<tr>
<td>N/A</td>
<td>&quot;Sick&quot;</td>
</tr>
</tbody>
</table>
7) Whether a referral was made to a residential program.

<table>
<thead>
<tr>
<th>Case File (n=395)</th>
<th>Self-Report (n=374)</th>
</tr>
</thead>
<tbody>
<tr>
<td>32% &quot;Yes, a referral was made to a residential chemical dependency program&quot;</td>
<td>36%</td>
</tr>
</tbody>
</table>