

INTERCHANGE
REFERRALS, CLIENTS,
AND GRADUATES:
THE FIRST TWO YEARS

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A PROCESS REPORT FOR THE ALCOHOL AND DRUG CRIMINAL
JUSTICE WORKING GROUP AND THE INTERCHANGE PROGRAM

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Executive Summary

InterChange is a secure alcohol and drug treatment program administered by the Multnomah County Department of Community Justice and has been in operation since November 1999. The InterChange program has two goals: reducing criminal behavior and reducing substance abuse. The following report is a review of the clients referred to the program, of those that actually entered the InterChange program, and those who then went on to graduate. The first two years of the program were reviewed. Results found that most clients were referred to the program by their PO, via a judge's orders. Most who were referred to InterChange, but who failed to enter the program, did so of their own volition. Of those that entered InterChange, three-quarters were white, in their mid-thirties and spent an average of 120 days in treatment. Fifty-eight percent of those who entered went on to graduate, regardless of race. The strongest predictor of graduation was the length of stay in the program—an average of six months for those who graduated. Age and assessment scores were also predictive of program completion. Results have practical implications for a program that has limited capacity and a pool of eligible candidates; age and assessment scores may be useful in increasing the likelihood of client graduation and program completion rates.

Referrals to InterChange

- A total of 370 referrals were collected for 357 unique clients
- It's estimated that less than 27% of referral data was actually collected
- The number of completed referrals has been steadily declining
- Most clients were referred to InterChange by their PO, probably via a judge's order
- One-third of all denials to InterChange treatment were due to the client's treatment refusal, lack of interest or motivation

Those entering InterChange

- A total of 253 treatment episodes occurred for 229 unique clients
- All were males—75% were White and 21% Black
- Hispanics appeared underrepresented, comprising 2% of the episodes
- The average age was 35.8 years
- The average treatment episode (success or failure) lasted 120 days

Those Graduating InterChange

- 179 clients were discharged with 104 individuals graduating treatment
- InterChange had a raw completion rate of 58%, similar to non-secure DCJ residential treatment facilities
- Race nor age differed between graduates and non-graduates
- Clients needed an average of 1.2 treatment episodes and a total length of stay of 183.4 days to graduate
- The program takes fewer days of treatment for clients to reach graduation than when the program first began
- The most important predictor of gradation was the length in treatment; 2.0-2.3 times more likely to graduate for each week in treatment
- Models were able to successfully predict client graduation in 94% of the cases
- Controlling for age and length of treatment, clients were 1.2 times *less likely* to graduate for every point scored on the CSSM test sub-dimension.
- Strong predictors of treatment length were not found

Recommendations

- Barriers to treatment for Hispanics should be addressed to increase access for this population
- When waiting lists develop, clients should enter InterChange based on likelihood of graduation
- Future measures should assess client pre-treatment motivation levels to determine if it is predictive of program completion

Introduction

InterChange is a secure alcohol and drug treatment program administered by the Multnomah County Department of Community Justice and is located in Washington County, Oregon. InterChange targets males who have a medium to high criminal risk level and a need for intensive alcohol and drug treatment, but who can also be safely housed in a minimum security environment. The InterChange program has two goals: reducing criminal behavior and reducing substance abuse. The program has been in operation since November, 1999. The data reviewed herein is from November, 1999 to November, 2001.

Referral Outcome

The first step towards entering InterChange treatment occurs with the program referral. Those referred are interviewed and assessed with the Referral Outcome Instrument (REFOUT). The REFOUT is a multiple question screening instrument designed to determine whether the candidate meets entrance criteria. It compiles data from a risk assessment instrument and the interview process itself. It can also help assess why candidates who were referred to InterChange did not get in.

Generally the REFOUT is administered by InterChange intake interviewers before entrance into the program. There have been three versions of the REFOUT, most using the same questions. The latest version has 17 questions (see Appendix).

From November 1999 to November 2001, a total of 370 REFOUTS were collected. There were 357 unique candidates identified; 344 had one REFOUT and 13 candidates had two (multiple screening episodes). According to October 2001 discharge summaries, 61 of the 357 clients with REFOUTS had actually entered InterChange at some point.¹ Since the program's inception, a total of 229 persons have entered treatment (several more than once), suggesting that at best only 27% of REFOUTS were collected over the last two years.² In addition, Figure 1 shows that the completed number of REFOUTS has been steadily declining, most notably over the last year.

¹ Some clients had multiple REFOUTS and some had multiple treatment episodes.

² Source of client counts comes from program discharge summaries, October 2001.

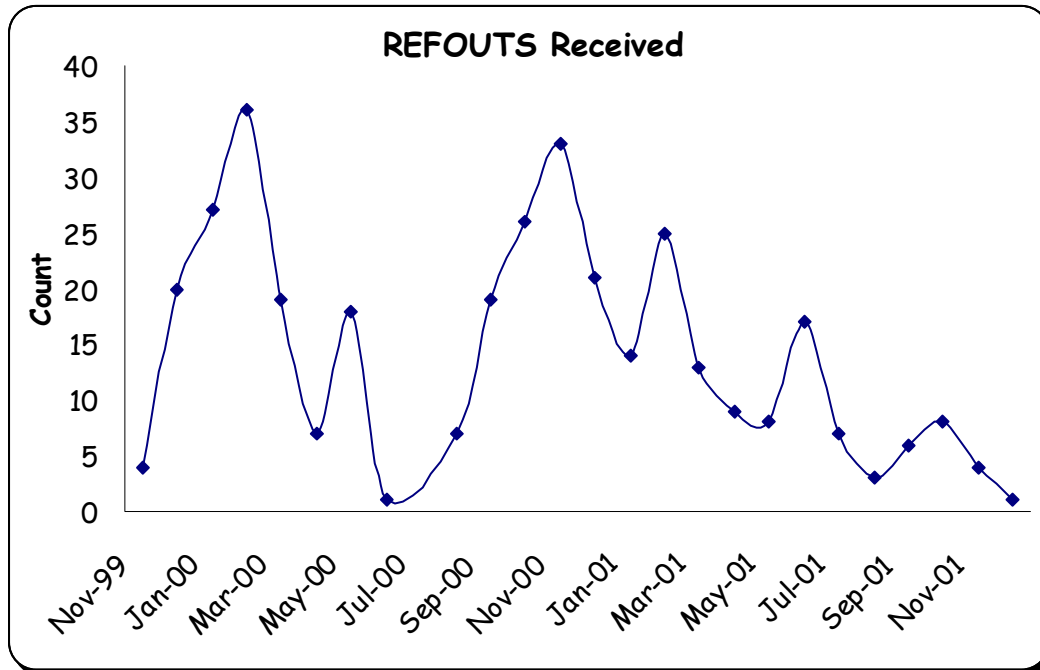


Figure 1. REFOUTS received over last two years

Program management stated that the decline in REFOUTS was because the instrument was less useful programmatically and fell out of use. In addition, new intake staff were not trained in applying the instrument. Evaluators agreed that the instrument was problematic and its best use was to assess denial reason frequency.

The REFOUT has a referral source identifier—this identifies who ordered the client to InterChange assessment (e.g., PO, judge, other). According to the data, 82% (304) referrals originated with the PO. However, program management believed that this amount was misleading, as it was more likely the case that the judge ordered the PO to enroll the client into treatment.³ The client may perceive this as the order of the PO and not that of the judge. Regardless, all other sources (i.e., IJIP, Defense Attorney, Local Control Team, Judge, other) only accounted for 57 referrals.⁴

A variety of criteria are applied to gain entrance into InterChange—client-based criteria (e.g., motivation) and programmatic-based (e.g., security concerns). An analysis of all denial reasons was performed. There were a

³ Wayne Scott, former InterChange program manager.

⁴ Totals do not match as some cases were missing referral source, while others marked more than one source.

total of 362 denials (a client may have multiple denials in the REFOUT instrument). Figure 2 shows the frequency of denial reasons by type. Of those denied to InterChange treatment, the client's treatment refusal (71), lack of interest (39) and motivation (11) accounted for a third.⁵

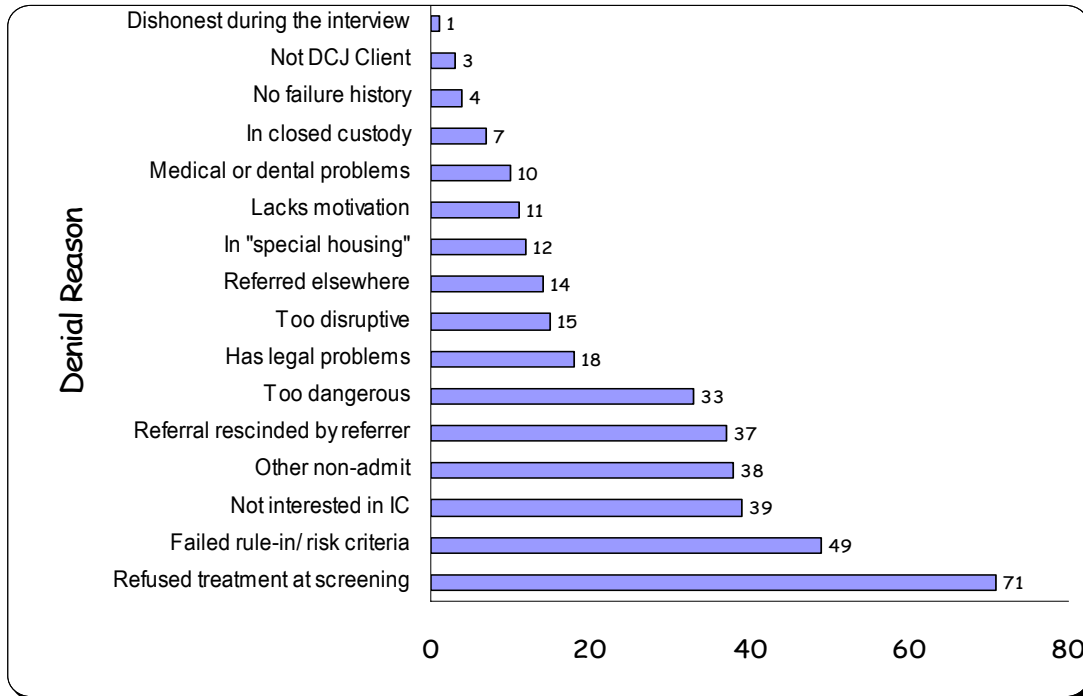


Figure 2. Frequency of REFOUT denial reasons

The REFOUT appears to be an effective instrument for screening out those not suitable for InterChange treatment. Examining program discharge reason codes during the same time period revealed only seven episodes (of 198) where the offender was removed due to violence or aggression, and seven for medical issues. The instrument screened out many offenders due to disruptive or dangerous histories, and those whose current health made them ineligible for treatment.

The primary reason for denial appears to have changed over time. According to a year 2000 summary report, the most common reason for denial to InterChange pertained to security risks.⁶ Of the preliminary sample that was studied, 67% were denied due to indications of dangerousness or

⁵ The questions of client motivation appeared on all instrument versions, while client interest and treatment refusal appeared on differing versions. Total denials for these reasons were 121.

⁶ Drapela, L. (2000). *InterChange Summary Report 1*, pg. 1.

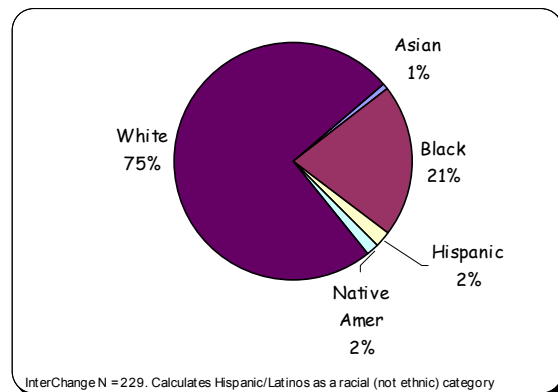
disruptiveness in their criminal histories. That has since fallen to 13% of all denial reasons. The dramatic change might be due to the initially small sample size, better identification of non-InterChange eligible clients before referral (thus never getting to the referral event), to the variety REFOUT instruments and quantity returned, or some combination of the above.

Clients Entering InterChange

Between November 1999 and October 2001, a total of 253 treatment episodes occurred for 229 clients (10% had more than one episode).⁷ All clients were males with an average age of 35.8 years. Whites accounted for the greatest number of clients at InterChange, followed by Blacks (see Table 1). Hispanics, who account for about 7.5% of the county's population and an estimated 4% of male arrestees who test positive for drugs, were noticeably underrepresented.⁸

Table 1. Racial Composition of InterChange Client

	Frequency	Percent
Asian	2	1%
Native American	4	2%
Hispanic	5	2%
Black	47	21%
White	171	75%
Total ⁹	229	100%



The average length of any treatment episode (e.g., graduate, failure, booster, etc.) was 120.3 days (SD = 64.25). Figure 3 shows the average length of an episode from the month the episode began. Additional analysis found no correlation between the age of the InterChange program (when the treatment episode began) and the average length of stay for any episode.¹⁰

7 Some episodes had not yet been completed. An episode is defined as a treatment intake listed on the InterChange discharge summary. As of the April 17, 2002 discharge summaries, a total of 323 treatment episodes have or were still occurring.

8 Census 2000. National Institute of Justice (2001). *ADAM Preliminary 2000 Findings on Drug Use and Drug Markets—Adult Male Arrestees*, pg 46.

9 Totals may add to more than 100% due to rounding.

10 Because an average episode was 120 days, the last four months of data (to October 2001) were not displayed due to a restriction of range. Correlational analyses only use data to May 2001.

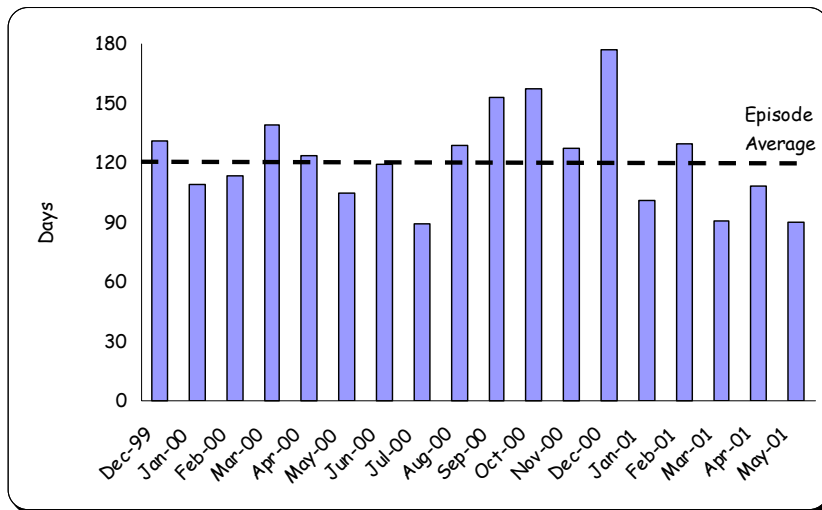


Figure 3. Average treatment length by month the episode began (any episode)

Many treatment episodes do not lead to graduation. According to discharge summaries of the 253 treatment episodes, the most common reasons for termination of a treatment at InterChange were for disruptive and noncompliant behaviors (32 cases) and absconding (17 cases).

InterChange Graduates

Of the 229 clients, 179 were discharged with the remaining 50 still in treatment at the time data was collected. Of those discharged, 104 individuals graduated InterChange for a raw completion rate of (58%).¹¹ This rate appears consistent with DCJ (non-secure) residential completion rates ranging from 52% to 68%.¹²

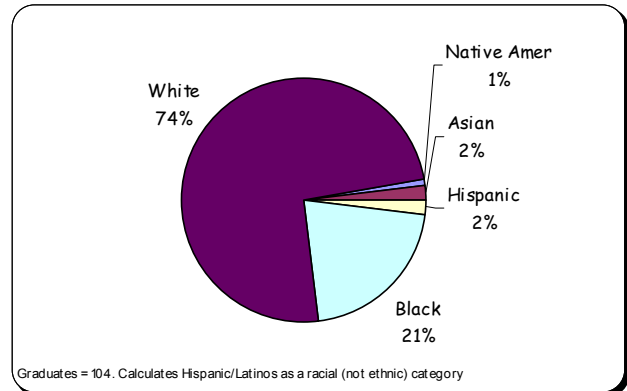
Table 2 depicts the racial composition of the graduates. Comparing Tables 1 and 2, shows a nominal difference in the proportion of racial demography between those who graduated and the general program population. The average age of graduates was 36.1 (SD = 8.7), also showing no significant difference.

¹¹ Program completion and graduation are used synonymously. Some clients graduated more than once; this counts whether a graduation occurred, not the volume of episodes. The completion rate did not control for neutral discharges (e.g., medical discharge), which when controlled for increased the completion rate to 60% in FY01 (see *Multnomah County Alcohol and Drug Treatment System: FY2002*. Board presentation 4-2-2002).

¹² Ibid.

Table 2. Racial Composition of InterChange Graduates

	Frequency	Percent
Native American	1	1%
Asian	2	2%
Hispanic	2	2%
Black	22	21%
White	77	74%
Total	104	100%



Total length of treatment was calculated for all graduates. This included all episodes that graduates entered. Graduates averaged 1.2 treatment episodes each (SD = 0.4) for a total length of stay of 183.4 days (SD = 31.7).¹³

Since the beginning of the program, the amount of time needed to graduate, has decreased. Figure 4 displays the significant, yet subtle decline in the number of days graduates needed to complete treatment ($r = -.366, p < .001$). For example, if clients started treatment in January 2000, they needed an average of 198 days to graduate. That number dropped to 167 days for those starting treatment in April 2001.

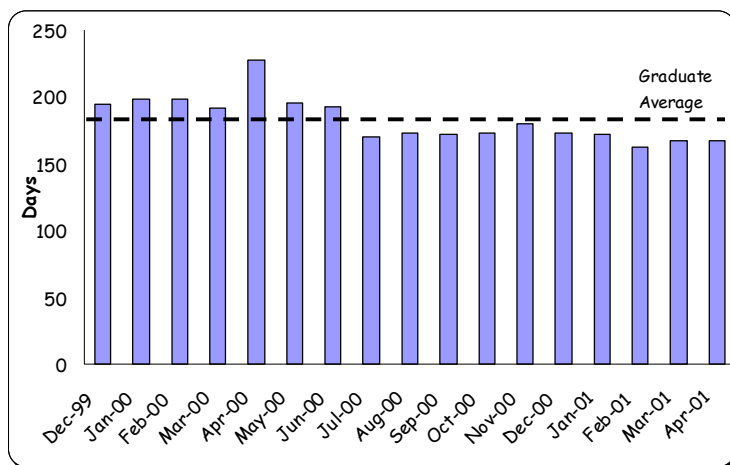


Figure 4. Average total length of stay for graduates, by date of first episode

¹³ There were 88 clients who received one treatment episode, 15 clients who received two treatment episodes, and one client who received three treatment episodes.

Predictors of Graduation

Research shows that among other variables, long-term treatment success is linked with treatment completion.¹⁴ Utilizing available data from client's initial assessments and demographic variables, models predicting treatment completion were produced. Models examined the likelihood of graduation during the initial treatment episode, or the likelihood of ever completing InterChange treatment.

Of the 179 clients that were discharged (c.f., above), 52 had missing assessment data (29% missing). Consistent with graduation rates, approximately two-thirds of the available data came from graduates and one-third from drop-outs. Using logistic regression to predict graduation, client's demographics (white, non-white and age), length of treatment(s), the Criminal Sentiment Scale (CSSM) and the Pride in Delinquency Scale (PID) were entered in the model.¹⁵ The resulting model found three variables which significantly ($\alpha = .05$) predicted graduation for both initial treatment episode and multiple episodes.¹⁶

As expected and not unusual, clients with longer treatment stays had significantly greater likelihood of graduation.¹⁷ This was also the single greatest predictor of graduation. Holding other variables constant, clients were 2.0 to 2.3 times *more likely* to graduate for each additional week of treatment they received.

Clients were found to be less likely to graduate as their age increased at the time of initial treatment. Stated another way, older clients were less likely to graduate from InterChange. Holding other variables constant, clients were 1.1 to 1.2 times *less likely* to graduate for each additional year of age at the time of initial treatment.¹⁸

14 Finigan, M. (1998). *An outcome program evaluation of the Multnomah County S.T.O.P. drug diversion program*. Northwest Professional Consortium, pg 39.

15 Nice, M. (2002). *Results of InterChange Graduate's Criminal Thinking Test Assessments*. Multnomah County Performance Management Group.

16 Initial episode: Model Chi-square (3) = 130.808, $p < .001$. Nagelkerke $R^2 = .884$. All treatment episodes: Model Chi-square (3) = 125.598, $p < .001$. Nagelkerke $R^2 = .874$.

17 Simpson, D. D., & Knight, K. (2001). The TCU model of treatment process and outcomes in correctional settings. *Offender Substance Abuse Report*, 1(4), 51-53 & 58. Civic Research Institute, New Jersey.

18 Age was significant at (α) .021 in the initial treatment model and neared significance (.057) in the likelihood of ever completing InterChange model.

In addition to length of treatment and age the client's score on the Criminal Sentiment Scale's attitudes towards Laws, Courts, and Police dimension was a significant, albeit modest, predictor of successful completion. Holding other variables constant, clients were approximately 1.2 times *less likely* to graduate for every point scored on the Criminal Sentiment Scale attitudes towards Laws, Courts, and Police dimension. Simply put, as client's pre-treatment attitudes towards law, courts and police were more negative, likelihood of successful treatment completion worsened. Results were similar whether predicting graduation on the first treatment episode, or regardless of treatment episodes.

Using the length of the client's stay in treatment to predict graduation is somewhat circular. That is to say, someone who stays in treatment longer is more likely to graduate (as non-graduates have failed out earlier), but we do not know how long they will remain in treatment *before* treatment begins. Thus the question remains, what predicts a client's length of stay in treatment (which in turn leads to graduation)?

Multiple regression models offered little help in determining a client's length of treatment stay. A model using demographics and pre-test scores as independent variables were used to predict initial treatment episode length of stay and the length of stay for all episodes, respectively. Results found that demographic variables (age, race) were not predictive and thus removed from the model. Again, the Criminal Sentiment Scale's attitude towards Laws, Courts, and Police dimension was found to be significantly predictive of length of treatment stay. As attitudes towards Laws, Courts, and Police worsened, the client's length of treatment time decreased. Unfortunately the model was able to account for only 4% of the predictive variance, a less than useful amount. In other words, 96% of what predicts treatment length of stay at InterChange could not be determine with the available data.

To summarize, clients that were younger, having more positive pre-treatment attitudes towards law, courts and police, and those who remained in treatment longer had greater likelihoods of InterChange graduation. It must be stressed that the model was missing 29% of possible data, nonetheless these predictors were stable regardless of whether it was the client's first treatment episode or their overall likelihood to graduate

regardless of number of treatment episodes. The model was able to accurately predict the likelihood of graduation in approximately 94% of available cases.¹⁹ No other variables tested were able to reliably predict InterChange graduation.

Conclusion

The criteria on the REFOUT instrument appeared to reasonably screen out candidates that were unsuitable for the InterChange program due to behavior and/or programmatic issues. An important discovery was that after referral to the program, a third of offenders self-selected out of InterChange, either through a refusal to sign themselves into the program, a perceived lack of motivation by the interviewer, or by a lack of interest on the part of the candidate.

By October 2001, a total of 253 treatment episodes had occurred or were continuing to occur for 229 clients. All were males with an average age was 35.8 years. Whites accounted for the majority of clients, with noticeably few Hispanic clients entering the program. Race did not appear to impact the likelihood of graduation.

One-hundred seventy-nine clients had already been discharged from InterChange, where 104 individuals graduated at some point. The graduation rate was consistent with non-secure DCJ residential treatment completion rates. Graduates needed an average of 1.2 treatment episodes and a total of 183 days to complete the program. This total has been steadily declining over the life of the program.

Clients that were younger, having more positive pre-treatment attitudes towards law, courts and police, and those who remained in treatment longer had greater likelihoods of InterChange graduation. Using these variables, models were able to accurately predict graduation in 94% of cases. The critical factor predicting graduation was length of treatment. Unfortunately models were unable to identify what predicts a client's length of stay in the program with available data. It is important to note that the data was limited to those clients with completed assessments, and results may not

¹⁹ Accounted for 87% of the predictive variance (Nagelkerke R²). Removing length of stay from the model, the accuracy of predicting graduation fell to near baseline of 67%, accounting for only 12%-14% of the variance.

apply to all clients. Nonetheless, this information has practical implications for a program that has limited capacity and a pool of eligible candidates.

Recommendations

Specific programmatic implications can be derived from these results. First, one noticeable group that appeared underserved was that of the Hispanic community. Identification of the barriers to treatment for Hispanics (e.g., language, family separation difficulties, etc.) should be performed. Problems should be addressed to increase access to this population.

The InterChange program has a limited capacity of 50 beds. The program has had a consistent waiting list for those candidates wanting to enter treatment. In situations where a pool of eligible candidates waits for a small number of beds, criteria predictive of graduation should be used in final selection instead of a first-come first serve basis. For example, if two candidates were both eligible, but only one bed was available, selecting the youngest candidate with the lowest CSSM score (Law, Courts, & Police), who may have had prior InterChange treatment would increase the likelihood that they would complete the program. This in-turn would increase the completion rates for the program.

Greater understanding of what predicts a client's length of stay should be examined. Research has identified that client motivation is a significant predictor of treatment completion and long term success.²⁰ While motivation to enter InterChange was examined during the client referral (c.f. REFOUT), it was used as a screening criteria cut-off point, not as an assessment instrument. Future measures should assess client pre-treatment motivation levels to determine if it is predictive of program completion.

²⁰ Simpson, D. D., & Joe, G. W. (1993). Motivation as a predictor of early dropout from drug abuse treatment. *Psychotherapy*, 30(2), 357-368. Simpson, D. D., Joe, G. W., Broome, K. M., Hiller, M. L., Knight, K., & Rowan-Szal, G. A. (1997). Program diversity and treatment retention rates in the Drug Abuse Treatment Outcome Study. *Psychology of Addictive Behaviors*, 11(4), 279-293.

Appendix
Referral Outcome Sheet (REFOUT)—Final Version



2532

**INTERCHANGE SECURE ALCOHOL AND DRUG TREATMENT
REFERRAL OUTCOME SHEET**

First Name	<input type="text"/>	Last Name	<input type="text"/>
SID state	SID number	Date	Treatment Episode #
<input type="text"/>	<input type="text"/>	<input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> 1

1. Referral Source (please mark all that apply)
 IJIP Field PO Def. Atty. Judge Local Control Team other _____

2. Referral failed eligibility criteria.
 Yes No

If the referral was not admitted to InterChange, please select the item between numbers 3 and 13 that BEST explains why.

If the referral failed the **eligibility** criteria, please indicate why:

- Yes No 3. Offender does not have a substance abuse history (DI).
- Yes No 4. Offender does not have a history of treatment failure in the community (DI).
- Yes No 5. Offender has medical or dental problems that interfere with participation in treatment (DI).
- Yes No 6. Offender has legal problems that interfere with participation in treatment (DI).

7. Referral failed the behavior risk assessment (interview).
 Yes No

If the referral failed the **behavior risk assessment interview**, please indicate the reasons why:

- Yes No 8. Offender has been in or is currently in closed custody (DNMS).
- Yes No 9. Referral judged to be too dangerous for a minimum security environment (DNMS).
- Yes No 10. Offender is not supervised by Multnomah County Adult Community Justice (DI).
- Yes No 11. Referral was referred to community or other alternative treatment (DR).

Form id



2532

**INTERCHANGE SECURE ALCOHOL AND DRUG TREATMENT
REFERRAL OUTCOME SHEET**

If the referral failed the assessment interview, please indicate the reasons (cont'd.):

Yes No 12. Referral refused treatment at screening (DF).

Yes No 13. Other

If you marked "yes" to item thirteen, please provide a brief description in the space below.

If the referral was admitted to InterChange, please select the item between numbers 14 and 17 that BEST explains the referral's status.

Yes No 14. Referral was admitted to InterChange and resides (resided) at the facility (A).

Yes No 15. Referral was accepted, but is not being released by the releasing authority (A).

Yes No 16. Referral refused treatment upon transfer to InterChange (A).

Yes No 17. Other

If you marked "yes" to item seventeen, please provide a brief description in the space below.