

Analysis of Public Sector AODA Data:  
What Variables Affect Outcomes?

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**Background**

One of the Bureau of Substance Abuse Services' strategic plan goals is to measure and utilize client outcomes. This paper describes a first analysis of client outcome data available from the Human Services Reporting System (HSRS) for most counties. Dane, Milwaukee, Walworth, and Wood County data are not included. The HSRS file from which the data were taken contains records from 27,160 clients who were discharged in 1998. The sample of clients actually analyzed was reduced to include only those clients who received "treatment" services and had complete data. This final sample contained 10,308 records.

**Defining "Successful" Outcomes**

The HSRS AODA Module contains four client outcome fields whose data is entered at discharge, namely: Service End Reason; Alcohol/Drug Use Frequency; Employment Status; and the Quality of Interpersonal Relationships. While most clients in the sample had positive outcomes in at least one of the areas, for the purposes of this analysis, a "successful" client was defined as one having a positive outcome in all four areas. These successful clients ***completed treatment with moderate or major improvement, were abstinent at discharge, were employed at discharge, and had positive interpersonal relationships at discharge*** (n=3,076). The data from this "successful" client group were then analyzed by a number of service utilization and client characteristic variables gathered by the data system. The findings from this analysis reveal some useful insights into: 1) system variables that affect outcomes; and 2) characteristics of clients for whom the public treatment system was more or less effective.

**System Variables Affecting Outcomes**

While the overall statewide rate of successful clients (according to the strict definition mentioned above) was 30%, intoxicated driver clients and employer referrals had the highest rates of successful clients at 42% and 41% respectively. It is evident that forms of coercion or pressure have a positive effect with AODA clients. Health agency (16%), social services (11%), and self (21%) referrals had the lowest rates of successful clients.

The rate of successful clients among treatment modalities revealed that intensive outpatient had the highest level of success (47%). According to the American Society of Addiction Medicine (ASAM) level of care criteria, intensive outpatient is determined to be the most appropriate level of care for a significant proportion of clients seeking treatment for dependency disorders. There were only 175 total discharges in the sample receiving this level of care.

The Sample		
Treatment Only Discharges With Complete Data	10,308	100%
Number Meeting Treatment Completion Outcome	5,845	57%
Number Meeting Abstinence Outcome	7,589	74%
Number Meeting Employment Outcome	7,177	70%
Number Meeting Positive Relationship Outcome	6,008	58%
Number Meeting All Four Outcomes	3,076	30%

The following table presents data on the average units (hours or days) of service received for selected

treatment modalities. In some of the modalities, the quantity of services provided greatly affects outcomes.

Modality	Successful Clients	Other Clients
Non-hospital residential	25 days	20 days
Halfway house	68 days	47 days
Intensive outpatient	30 hours	21 hours

### Client Variables Affecting Outcomes

A client's social characteristics, in many instances, were related to outcomes. Teens (8%) and those over age 60 (16%) had fewer clients in the successful category than other age groups between 18 and 59 (range 27%-34%). Thirty-two percent of males and 23% of females were classified as successful. If the success criteria of "employment" is dropped for age groups and gender, teens and females are still 9-10 percentage points lower than the others. Hispanics (38%) and Caucasians (30%) had better outcomes than African Americans (21%) and Native Americans (19%). Clients with a high school diploma or higher (33%) had better outcomes than no H.S. diploma (26%).

The client's severity of addiction was also related to outcomes. Employed clients (40%) had better outcomes than the unemployed (18%). Thirty-two percent of clients whose primary drug of abuse was alcohol were classified as successful vs. 12-21% of clients abusing other drugs. Only 16% of clients with a co-occurring mental health disorder were classified as successful.

### Summary and Implications

A certain degree of caution is advised in interpreting this information since there are reporting issues, including the absence of four counties' data, that may affect the quality of the data analyzed. In addition, the stringent definition of success used in this analysis may have resulted in findings that would not have been found had another definition been used. The following implications may be drawn from the analysis:

1. Variables related to social characteristics (i.e. age, female, certain ethnic groups, education) appear to affect outcomes. It is, therefore, important to evaluate our treatment approaches with these client groups and implement activities (e.g. training, program and counselor specialization, enhanced treatment approaches, etc.) that will improve outcomes.
2. Self-referrals and referrals from health agencies and social services have lower outcomes than those referred by the courts or employers. This points to the need for motivational enhancement techniques or the employment of creative methods of coercion or contingencies among certain client groups.
3. The study data verify the fact that keeping clients engaged in treatment longer or for more sessions generally results in better outcomes. Developing fiscal policies and motivational techniques and incentives that encourage clients to stay in treatment longer and addressing clients' reasons for dropping out of treatment is advised by this analysis.
4. Lastly, intensive outpatient had the highest rate of successful clients. According to the ASAM criteria, this service is underutilized in Wisconsin. It is recommended that efforts be undertaken to implement this level of care and increase its use throughout the state.