



## Substance Use Outcomes

4.60.TGH-AH.2009.1 | Final Report: TGH-AH



### Tacoma General and Allenmore Hospitals

Six-Month Follow-up Survey of WASBIRT Patients  
April 12, 2004 - March 31, 2008

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Use of alcohol and other drugs declined among emergency department patients who received brief interventions for substance use disorders through WASBIRT

Tacoma and Allenmore Hospitals (TGH-AH) are two of the nine hospitals in Washington State that agreed to participate in the Washington State Screening, Brief Intervention, Referral and Treatment (WASBIRT) Project which began in the spring of 2004. Through this project, chemical dependency counselors screen primarily emergency department patients for alcohol and drug use. Based on the patient's level of risk for substance use disorders, the counselor provides brief interventions to anyone at moderate or high risk levels. They also refer patients with more serious disorders to brief therapy or more traditional forms of chemical dependency (CD) treatment.

To see whether brief interventions or additional counseling helps reduce patients' levels of alcohol or other drug use, a sample of 881 out of 4,971 TGH-AH patients who received at least a brief intervention were selected randomly for a follow-up telephone interview six months later. Interviews were completed with 667 individuals in the sample – a response rate of 79%.

Tacoma and Allenmore Hospitals patients who received brief interventions through the WASBIRT Project as well as those who went on to receive additional forms of counseling for alcohol or other drug use have altered their substance use patterns significantly ( $p < .05$ ). The following changes occurred:

- Number of days of drinking and other drug use declined.
- Abstinence from alcohol and other drug use increased.
- Binge drinking declined.

Among all patients who received at least a brief intervention, the average number of days of alcohol or drug use declined:

- From 6.9 to 4.0 days for drinking ( $p < .05$ ).
- From 3.0 to 1.5 days for binge drinking ( $p < .05$ ).
- From 4.5 to 2.7 days for drug use ( $p < .05$ ).

Among the subset of patients who drank or used drugs in the 30 days before they were screened and received a brief intervention, a large proportion reported fewer days of drinking or drug use at the time of the follow-up survey.

- 78% of 474 patients who drank alcohol reduced the number of days of drinking in the past 30 days, and 36% stopped drinking altogether.
- 84% of 285 patients who reported bingeing in the past 30 days reduced the number of heavy drinking days.
- 80% of 249 patients who reported drug use in the past 30 days reduced the number of days of use, in part because 25% stopped using drugs.

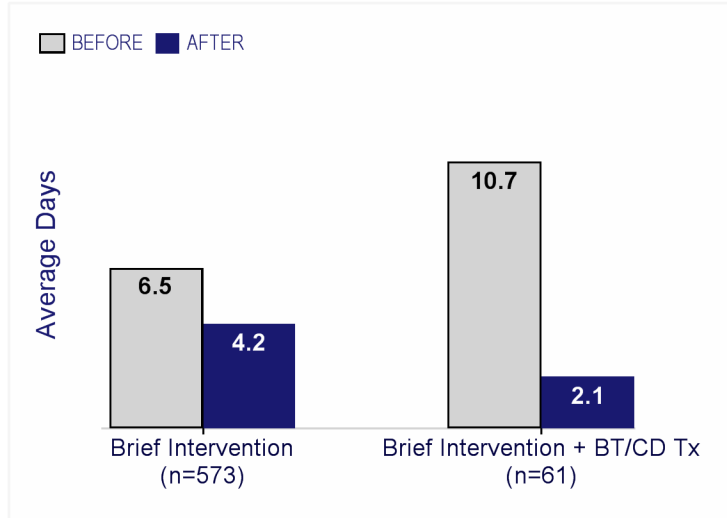
## Alcohol Use Outcomes

Average days of alcohol use in the past 30 days decreased as follows:

From 6.5 to 4.2 days (35% decrease) for patients who received a brief intervention only ( $p < .05$ ).

From 10.7 to 2.1 days (81% decrease) for patients who received a brief intervention plus brief therapy and/or chemical dependency treatment (BT/CD Tx) ( $p < .05$ ).

From 6.9 to 4.0 days (42% decrease) overall ( $p < .05$ ).

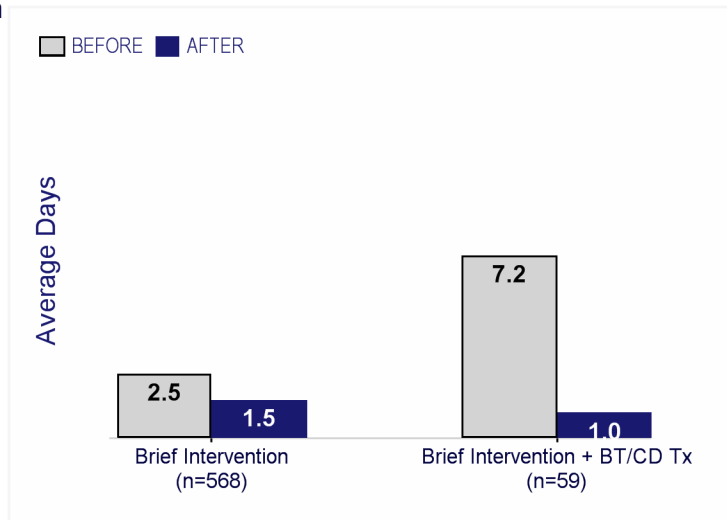


Average days of binge drinking in the past 30 days decreased as follows:

From 2.5 to 1.5 days (40% decrease) for patients who received a brief intervention only ( $p < .05$ ).

From 7.2 to 1.0 days (86% decrease) for patients who received a brief intervention plus brief therapy and/or chemical dependency treatment (BT/CD Tx) ( $p < .05$ ).

From 3.0 to 1.5 days (50% decrease) overall ( $p < .05$ ).

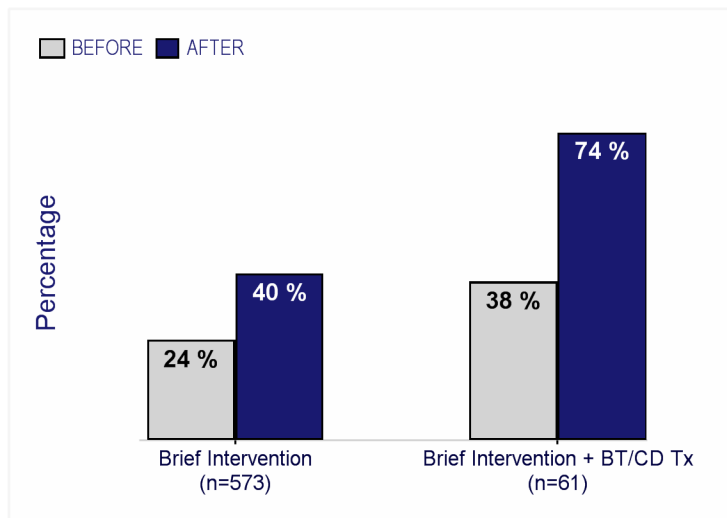


Abstinence from alcohol increased significantly:

From 24% to 40% (66% increase) for patients who received a brief intervention only ( $p < .05$ ).

From 38% to 74% (96% increase) for patients who received a brief intervention plus brief therapy and/or chemical dependency treatment (BT/CD Tx) ( $p < .05$ ).

From 25% to 43% (72% increase) overall ( $p < .05$ ).



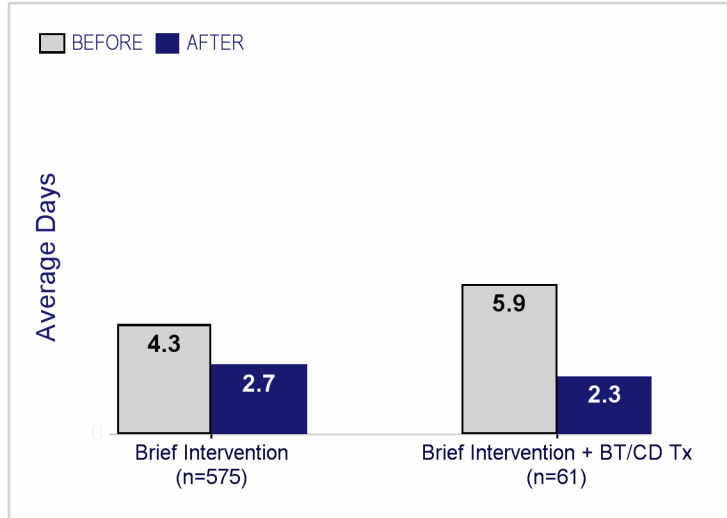
## Drug Use Outcomes

Average days of drug use in the past 30 days decreased as follows:

From 4.3 to 2.7 days (36% decrease) for patients who received a brief intervention only ( $p < .05$ ).

From 5.9 to 2.3 days (61% decrease) for patients who received a brief intervention plus brief therapy and/or chemical dependency treatment (BT/CD Tx) ( $p < .05$ ).

From 4.5 to 2.7 days (40% decrease) overall ( $p < .05$ ).

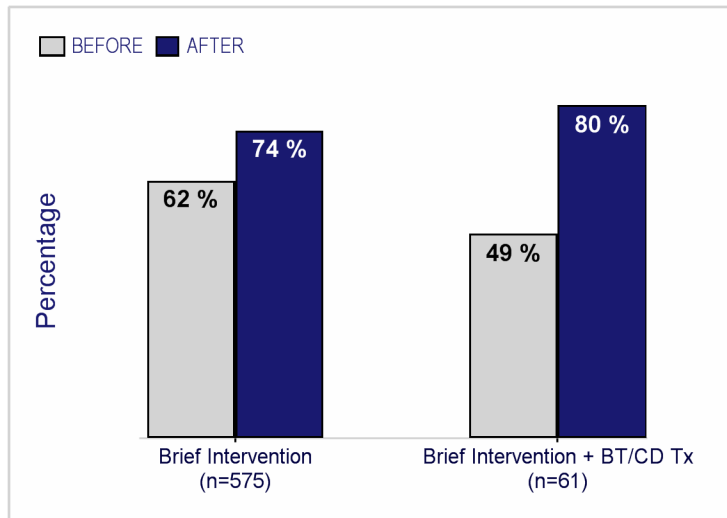


Abstinence from drug use increased significantly:

From 62% to 74% (18% increase) for patients who received a brief intervention only ( $p < .05$ ).

From 49% to 80% (63% increase) for patients who received a brief intervention plus brief therapy and/or chemical dependency treatment (BT/CD Tx) ( $p < .05$ ).

From 61% to 74% (21% increase) overall ( $p < .05$ ).



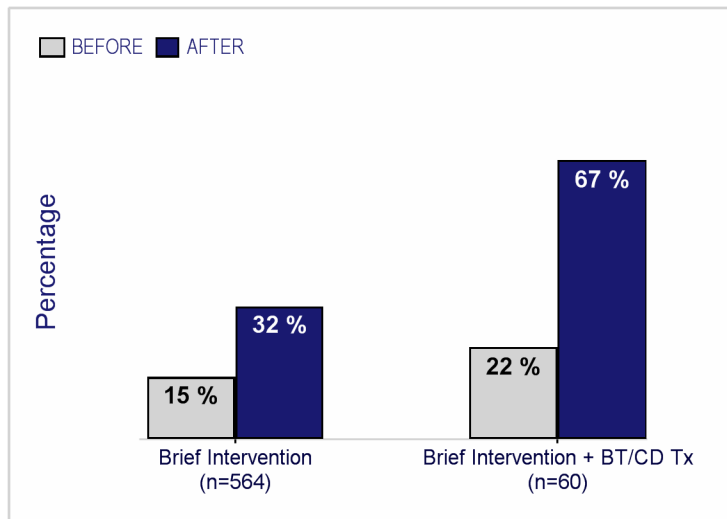
## Abstinence from Alcohol and Drugs

Abstinence from alcohol and drug use increased significantly:

From 15% to 32% (114% increase) for patients who received a brief intervention only ( $p < .05$ ).

From 22% to 67% (208% increase) for patients who received a brief intervention plus brief therapy and/or chemical dependency treatment (BT/CD Tx) ( $p < .05$ ).

From 16% to 36% (125% increase) overall ( $p < .05$ ).



## TECHNICAL NOTES

### Six-Month Follow-up Survey Procedures

Out of the 4,971 TGH-AH patients who received at least a brief intervention, a sample of 881 patients was selected for the follow-up survey. Interviews were completed with 667 individuals in the sample—a response rate of 79% percent (excluding 10 people who died by the time the interview was due).

Analyses were based on 634 participants with complete data on alcohol use, 627 with complete data on binge drinking, and 636 with complete data on drug use. Analyses excluded 8 participants (1.2%) who did not receive a brief intervention because the patient was not willing to talk to the counselor, was already in treatment, or for some other reason. Analyses also excluded 9 participants (1.3%) who did not give permission for the use of chemical dependency treatment records needed to classify the level of intervention. Beginning in July 2005, sample selection criteria were refined such that only those with moderate or high risk for substance use disorders were eligible for the follow-up survey.

Follow-up interviews were conducted at the Research and Data Analysis Division using standard survey techniques that included mailing advance contact letters and multiple attempts to call hard-to-reach respondents. Contact information was gathered from the patient at baseline and augmented by administrative records to update contact information if the patient gave permission for this.

### Measures of Substance Use Outcomes

Changes in alcohol and other drug use were based on a person's answers on the baseline screening survey compared to answers on the six-month follow-up interview, using the following questions:

*During the past 30 days, how many days have you ...*

- *Used any alcohol?*
- *Had 5 or more drinks in one sitting? (This was used as a measure of binge drinking.)*
- *Used any illegal drugs? (Use of illegal drugs included misuse of prescription drugs.)*

### Classification of Risk and Intervention Groups

Outcomes' risk levels were based on scores on the Alcohol Use Disorders Identification Test (AUDIT) and the Drug Abuse Screening Test (DAST). Two groups were used in analyses: (1) those who received only a brief intervention and (2) those who received a brief intervention plus brief therapy, CD treatment, or both within 120 days of the brief intervention. The receipt of brief therapy or CD treatment was identified from WASBIRT records or from the Division of Alcohol and Substance Abuse's treatment data (TARGET) for the 658 participants who gave permission for the use of administrative records.

The average AUDIT and DAST scores are shown below for patients who received a screen only, a brief intervention only, or a brief intervention plus brief therapy or CD treatment. The table also shows the recommended level of intervention based on the degree of risk for a substance use disorder.

	Screen Only (Not in follow-up survey)	Brief Intervention Only	Brief Intervention Plus Brief Therapy or CD Treatment
<b>Average Scores</b>			
AUDIT	1	4	13
DAST	0	1	4
<b>Criteria for Intervention</b>			
AUDIT - Female	Less than 7	7 - 15	16 - 40
AUDIT - Male	Less than 8	8 - 15	16 - 40
DAST	0	1 - 4	5 - 10
Binge drinking		x	
Drank alcohol before injury		x	

This report was funded through grant number 1 UD1 TI15962-05 from the Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment to the Office of the Governor.

Additional copies of this paper may be obtained from: <http://www1.dshs.wa.gov/RDA>  
or <http://www1.dshs.wa.gov/dasa>



Research and Data Analysis Division Report Number 4.60.TGH-AH.2009.1