



## Providence Everett Medical Center Substance Use Outcomes

4.60.PEMC.2007.1 Preliminary Report: PEMC



### Use of Alcohol and Other Drugs Declined Among PEMC Emergency Department Patients who Received Brief Interventions for Substance Use Disorders through WASBIRT

Six-Month Follow-up Survey for WASBIRT Participants from PEMC  
April 12, 2004 – March 31, 2006

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Providence Everett Medical Center (PEMC) is one of 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 383 out of 2,217 PEMC patients with moderate or high risk for substance use disorders were selected randomly for a follow-up telephone interview six months later. Interviews were completed with 308 of the sample—an 81 percent response rate. Analyses were based on 294 study participants with complete information on alcohol use and binge drinking questions and 205 with complete information on drug use questions. (See Technical Notes.)

#### Alcohol and other drug use declined for patients who got at least a brief intervention.

PEMC patients who received brief interventions through the WASBIRT Project as well as those who received 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 substance users who received at least a brief intervention, use reported in the six-month follow-up interview declined significantly compared to use reported at screening.

- 80% of 205 patients who drank alcohol reduced the number of days of drinking in the past 30 days, in part because 40% of them had stopped drinking.
- Average days of drinking in the past 30 days declined from 11.5 to 5.2 days ( $p < .05$ )
- 90% of 133 patients who reported bingeing in the past 30 days reduced the number of heavy drinking days, with the average declining from 12.4 to 2.8 days ( $p < .05$ ).
- 80% of 145 patients who reported drug use in the past 30 days reduced the number of days of use, primarily because half of them (50%) stopped using drugs.
- Average days of drug use in the past 30 days declined from 14.8 to 6.1 days ( $p < .05$ ).

We thank the following for their contribution to the WASBIRT Project:

Snohomish County Alcohol and Drug Coordinator  
Providence Everett Medical Center  
Providence Everett Behavioral Health Services  
Evergreen Manor

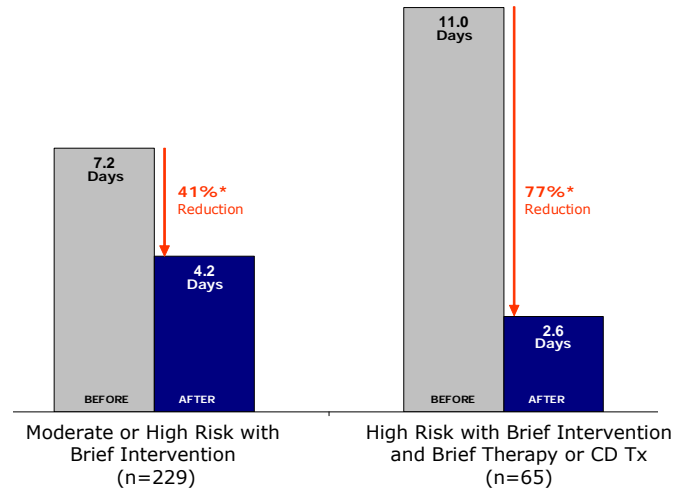
## Alcohol Use Outcomes

### Average days of alcohol use in the past 30 days declined significantly

The average number of days of drinking in the last 30 days declined significantly:

- From 7.2 to 4.2 days (41% decrease) for 229 patients with a moderate or high risk for substance use disorders who received only a brief intervention.
- From 11.0 to 2.6 days (77% decrease) for patients with a high risk for substance use disorders who received a brief intervention plus brief therapy or CD treatment.

\*p < .05

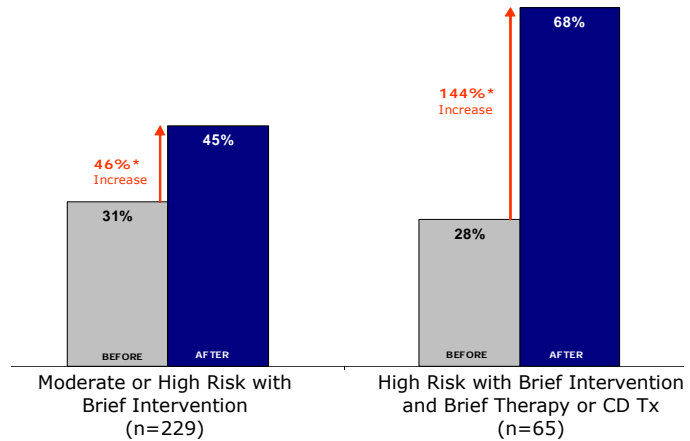


### Abstinence from alcohol in the past 30 days increased significantly

Abstinence from alcohol increased significantly:

- From 31% to 45% for 229 moderate or high risk patients who got a brief intervention (+46% increase).
- From 28% to 68% for 65 high risk patients who received a brief intervention plus brief therapy or CD treatment (+144% increase).

\*p < .05

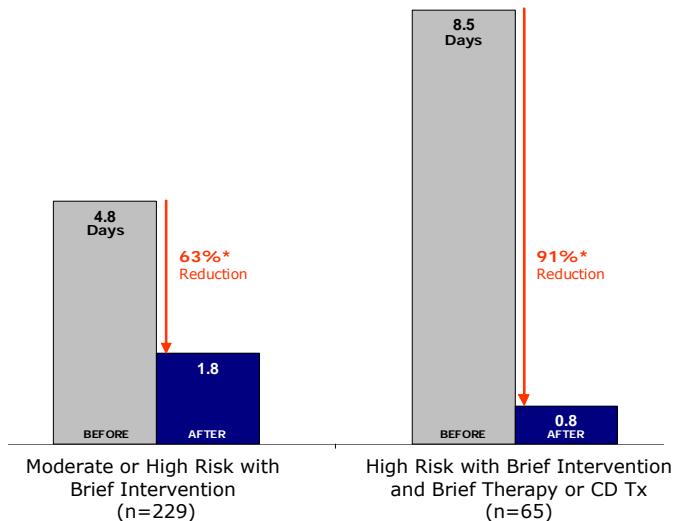


### Binge drinking in the past 30 days declined significantly in high risk groups

Binge drinking was counted as having five or more drinks in one sitting in the last 30 days. Average days of binge drinking dropped significantly:

- From 4.8 to 1.8 days (63% decrease) for 229 moderate or high risk patients who received a brief intervention.
- From 8.5 to 0.8 days (91% decrease) for 65 high risk patients who received a brief intervention plus brief therapy or CD treatment.

\*p < .05



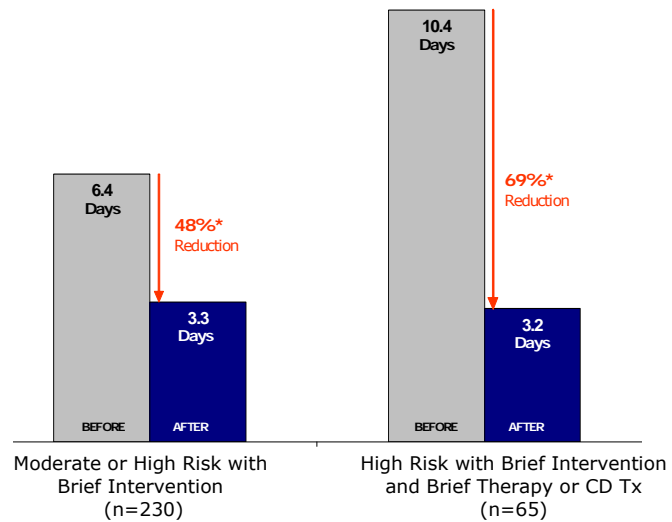
## Drug Use Outcomes

### Average days of drug use in the past 30 days declined significantly

The average number of days of drug use in the past 30 days:

- Dropped from 6.4 to 3.3 days (48% decrease) for 230 moderate or high risk patients who received a brief intervention.
- Dropped from 10.4 to 3.2 days (69% decrease) for high risk patients who received a brief intervention plus brief therapy or CD treatment.

\*p < .05

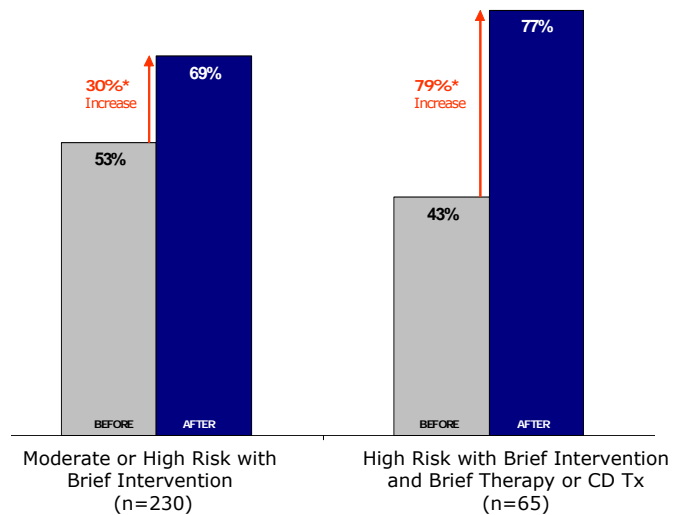


### Abstinence from drug use in the past 30 days increased significantly

Abstinence from drug use increased significantly:

- From 53% to 69% for 230 moderate or high risk patients who received a brief intervention (+30% increase).
- From 43% to 77% for 65 high risk patients who received a brief intervention plus brief therapy or CD treatment (+79% increase).

\*p < .05



## TECHNICAL NOTES

### Six-Month Follow-up Survey Procedures

Out of the 2,218 PEMC patients with moderate or high risks for substance use disorders, a sample of 383 patients was selected for the follow-up survey. Interviews were completed with 308 of the sample—an 81 percent response rate (excluding four people who died by the time the interview was due).

Analyses were based on 294 participants with complete data on alcohol use and binge drinking questions and on 295 with complete information on drug use questions. Analyses exclude 13 cases (4%) because of inconsistencies between the person's screening scores and the level of intervention received or because the persons did not give permission for the use of administrative records that were used to determine who entered chemical dependency treatment.

Follow-up interviews were conducted at the Research and Data Analysis Division using standard survey techniques that included mailing of 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

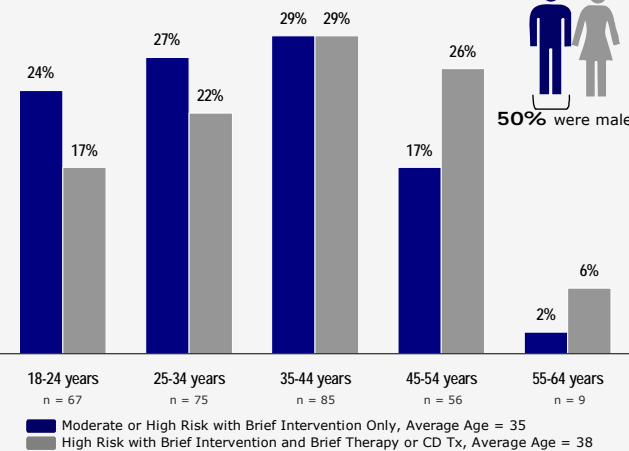
Participants were divided into risk levels based on scores on the Alcohol Use Disorders Identification Test (AUDIT) and the Drug Abuse Screening Test (DAST). Risk level (low, moderate, or high) equaled the highest level of risk from AUDIT or DAST score, bingeing, or indicators of chemical dependency on the AUDIT. Two groups were formed: (1) moderate or high risk and received only a brief intervention and (2) high risk and 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, Division of Alcohol and Substance Abuse's treatment data (TARGET), or the Medicaid Management Information System for the 302 participants who gave permission for the use of administrative records.

	Low Risk with Screen Only (not in follow-up)	Moderate or High Risk with Brief Intervention	High Risk with Brief Intervention Plus Brief Therapy or CD Treatment
<b>Average scores</b>			
AUDIT	1	11	18
DAST	0	3	5
<b>Screening scores</b>			
AUDIT - Female	Less than 7	7 – 40	16 – 40
AUDIT - Male	Less than 8	8 – 40	16 – 40
DAST	0	1 – 10	3 – 10
<b>Additional criteria</b>			
Binge drinking		X	
Alcohol dependence condition		X	X

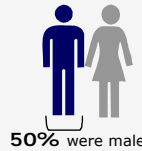
## Demographics

### Age Distribution

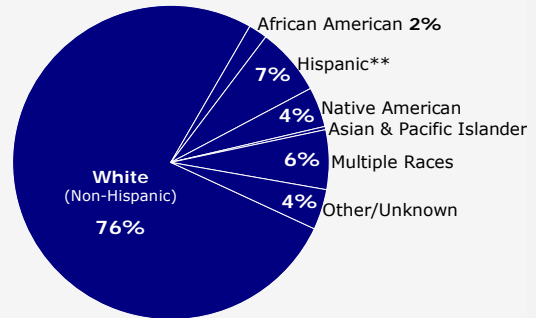
TOTAL = 295\*



### Gender



### Race | Ethnicity\*



\* Race/ethnicity is shown for the total sample since the counts in some intervention categories are too small to distribute by race.  
\*\* Persons of Hispanic Origin are counted only under the "Hispanic" category.

Additional copies of this paper may be obtained from: <http://www1.dshs.wa.gov/RDA/> or <http://www1.dshs.wa.gov/dasa/> or through the Washington State Alcohol|Drug Clearinghouse by calling 1-800-662-9111 or 206-725-9696 (within Seattle or outside Washington State), by e-mailing [clearinghouse@adhl.org](mailto:clearinghouse@adhl.org), or by writing to 6535 Fifth Place South, Seattle, Washington 98108-0243.

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