Washington State Screening, Brief Intervention, and Referral to Treatment Program

Final Program Performance Report: October 1, 2003 through September 30, 2009

JULY 2010

GRANT NUMBER: 4 TI015962-05-1
DSHS|RDA REPORT NUMBER: 4.83

Washington State Department of Social & Health Services
RDA Research & Data Analysis Division
Abstract: This report provides a description of the accomplishments of the Washington State Screening, Brief Intervention, and Referral to Treatment (WASBIRT) Program, funded by federal grant number 4 TI015962-05-1. The WASBIRT Program was conducted in nine hospitals within six counties in the state. Over 104,000 screenings were completed in the hospital emergency departments. This report provides detailed information about the results of the WASBIRT evaluation project which found reductions in substance use, reductions in medical costs, improvements in social and mental health outcomes, and reduced risk of death. The Division of Behavioral Health and Recovery has undertaken a number of activities to sustain SBIRT services in Washington state in the future, including the publication of a training manual for acute care settings and changes to Washington Administrative Code to provide screening and brief intervention as certified services.

Keywords: Alcohol/Drug Treatment, Cost Offsets, Medicaid, Substance Abuse, Alcohol/Drug Screening, Addiction Costs, Brief Intervention, Referral, Emergency Department Intervention.

Category: Substance Abuse Intervention and Referral to Treatment

Geography: Washington State

Research Time Period: October 2003 to September 2009

Publication Date: July 2010

Publication Number: 4.83

Project Name: Washington State Screening, Brief Intervention, and Referral to Treatment Program

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Cover Design by: DSHS Research and Data Analysis Division
To the Reader

TO: Substance Abuse and Mental Health Services Administration

It is my privilege to transmit the final program performance report for Washington State’s Screening, Brief Intervention, and Referral to Treatment (SBIRT) Program. As one of the first states to receive funding from SAMHSA for the SBIRT grant initiative, I am pleased to report the many accomplishments we have been able to achieve.

Over 104,000 screenings for substance abuse disorders were completed in nine separate hospital emergency departments. Washington State successfully implemented our SBIRT program in nine hospitals located in six counties.

SBIRT was associated with a number of improvements in substance use, mental health, and other outcomes. Patients who got at least a brief intervention reported significant declines in the use of alcohol and other drugs, increased abstinence, reduced anxiety and depression, increased employment, and reductions in homelessness. We also found significantly lower death rates for working-age disabled Medicaid clients than for a statistically matched set of emergency department patients.

Admissions to chemical dependency treatment increased for those who got brief interventions and even more for those who received brief treatment. The odds of entering chemical dependency treatment were significantly greater among Medicaid and other low-income patients who received at least a brief intervention compared to those who did not.

Medical costs were significantly lower among working-age disabled Medicaid clients. Providing at least a brief intervention to working-age disabled Medicaid clients was associated with significant reductions in subsequent medical costs compared to costs for similar patients who did not get SBIRT services.

The work continues. Several of the participating hospitals chose to continue to offer SBIRT services once the federal grant ended. In addition, the Division of Behavioral Health and Recovery collaborated with the state’s Medicaid program to propose an amendment to the state’s Medicaid plan to include screening and brief intervention (SBI) services. Our division modified our state’s Administrative Code to include SBI as a new form of certified service. We recently published an SBIRT training manual for providers in acute medical care settings. We continue to seek ways to incorporate SBIRT services into our state’s health care system.

We look forward to future collaborations working toward our common goals to improve the continuum of care for patients with substance use disorders.

David A. Dickinson, MA, Director
Division of Behavioral Health and Recovery
Washington State Screening, Brief Intervention, and Referral to Treatment Program (WASBIRT)

Final Program Performance Report, October 1, 2003 through September 30, 2009

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H. The Use of Administrative Data as a Substitute for Individual Screening Scores in Observational Studies Related to Problematic Alcohol or Drug Use
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I. Legal Authorities: Washington Administrative Code (WAC)
Washington State Screening, Brief Intervention, and Referral to Treatment Program (WASBIRT)

Final Program Performance Report: October 1, 2003 through September 30, 2009

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GRANT NUMBER: 4 TI015962-05-1

IN THE FALL OF 2003, the U.S. Department of Health and Human Services, Center for Substance Abuse Treatment (CSAT) awarded funding to the Office of the Governor for the State of Washington for a five-year cooperative agreement, titled the Screening, Brief Intervention, and Referral to Treatment (SBIRT) Program. The Governor’s Office directed the Division of Alcohol and Substance Abuse, now the Division of Behavioral Health and Recovery (DBHR), of the Department of Social and Health Services (DSHS) to implement a Washington State SBIRT (WASBIRT) Project in large hospital emergency departments across the state.

The WASBIRT Action Plan submitted by the Division of Alcohol and Substance Abuse to CSAT in January 2004 identified six specific goals for the Project. This report describes the activities undertaken during the project to address each goal.

GOAL 1 | Identify a large number of emergency department (ED) patients with substance abuse problems.

In April 2004, the first patients were enrolled in the WASBIRT Project at Harborview Medical Center in Seattle. Enrollment began shortly thereafter at several other sites and continued through the end of January 2009 culminating in a total of 106,464 screenings by the end of the project (see Appendix A for final WASBIRT Internal Tracking Report, April 12, 2004 – January 31, 2009).
The WASBIRT project was a joint partnership of the Washington State Department of Social and Health Services, six county governments, nine hospitals, and over a dozen chemical dependency treatment agencies. A unique feature of the WASBIRT project was the use of Chemical Dependency Professionals (CDPs) as the staff to screen patients in hospital Emergency Departments (EDs) and to conduct brief interventions immediately thereafter for patients who screened high for potential substance use disorders. CDPs also provided brief treatment within chemical dependency (CD) treatment agencies or in behavioral health units within the hospital, depending on the site.

A chart depicting the patient flow using the Washington State model for implementing SBIRT services is shown below. The instruments used for screening patients were the Alcohol Use Disorders Identification Test (AUDIT) and the Drug Abuse Screening Test (DAST-10), shown in Appendix B.

Washington State Patient Flow Chart for Screening, Brief Intervention, and Referral to Treatment of Substance Abuse

The overall goal of the project was to enroll 122,905 patients. The project completed 106,464 screenings with a total of 96,090 patients since some patients were screened more than once during the project. Below are total intakes in four SBIRT modalities that reflect the level of service a patient was expected to receive according to the risk level defined by their screening scores. These categories were based on an intent-to-treat model for the Government Performance and Results Act (GPRA) reporting.

Patients Served by WASBIRT: Targets and Actual Number Served
October 1, 2003 – September 30, 2009

<table>
<thead>
<tr>
<th>MODALITY</th>
<th>TARGET</th>
<th>ACTUAL SERVED</th>
<th>PERCENT OF TARGET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screening and Feedback (SF)</td>
<td>72,528</td>
<td>58,733</td>
<td>81%</td>
</tr>
<tr>
<td>Brief Intervention (BI)</td>
<td>45,362</td>
<td>22,357</td>
<td>49%</td>
</tr>
<tr>
<td>Brief Treatment (BT)</td>
<td>3,783</td>
<td>5,837</td>
<td>154%</td>
</tr>
<tr>
<td>Referral to Treatment (RT)</td>
<td>1,232</td>
<td>9,163</td>
<td>744%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>122,905</td>
<td>96,090</td>
<td>78.2%</td>
</tr>
</tbody>
</table>
GOAL 2 | Deliver screening and brief interventions (BI) in six hospital EDs.

The hospital sites that participated in the WASBIRT project and the dates of implementation were:

- Harborview Medical Center in Seattle, King County – April 12, 2004
- Tacoma General in Tacoma, Pierce County – April 26, 2004
- Southwest Washington Medical Center in Vancouver, Clark County – May 3, 2004
- Providence Everett Medical Center in Everett, Snohomish County – July 5, 2004
- Yakima Regional Medical and Heart Center, in City of Yakima, Yakima County – December 22, 2004
- Toppenish Community Hospital in Toppenish, Yakima County – December 22, 2004
- Yakima Valley Memorial Hospital in Yakima, Yakima County – July 10, 2005
- Allenmore Hospital in Tacoma, Pierce County – September 12, 2005
- Providence St. Peter Hospital in Olympia, Thurston County – September 19, 2006

The WASBIRT Project incorporated CD treatment agencies as important partners in this project. A dozen certified CD treatment programs operating either as independent agencies or as separate units within a hospital or medical center participated actively in the WASBIRT Project, as follows:

- Clark County
  - Lifeline Connections*
  - Northwest Recovery Center*
  - Columbia River Mental Health
- Pierce County
  - Metropolitan Development Council*
- King County
  - Harborview Mental Health Services, Outpatient Program*
  - Recovery Centers of King County
- Snohomish County
  - Providence Recovery Program - Behavioral Health Services*
  - Evergreen Manor
- Thurston County
  - Providence St. Peter Chemical Dependency Program*
- Yakima County
  - Triumph Treatment Services*
  - Merit Resources Services
  - Casa de Esperanza

*Denotes programs that hired Chemical Dependency Professionals to work in participating hospitals to perform WASBIRT functions (screenings, brief interventions, and referrals). All of the CD treatment programs provided brief treatment and, in most programs, chemical dependency treatment to patients screened through the WASBIRT Project.
These agencies and behavioral health programs were responsible for hiring and supervising the Chemical Dependency Professionals (CDPs) who conducted the WASBIRT activities in each of the participating hospitals, including screening patients, providing brief interventions, and giving referrals. These programs also provided brief treatment on an outpatient basis and, for some patients, more traditional forms of chemical dependency treatment. Using CD treatment agencies as partners in the project contributed greatly to improving the links between the medical and CD treatment communities, which was one of the underlying emphases of this project.

**Training for Screening, Brief Intervention, and Referral to Treatment for Substance Abuse**

Training of the CDPs was a high priority for the WASBIRT Project. At the onset, Chris Dunn, Ph.D., a national expert on motivational interviewing and brief intervention for substance use disorders, joined the WASBIRT Project as its training expert. Dr. Dunn, who works as a clinical psychologist at the University of Washington Harborview Medical Center, remained the WASBIRT training expert for the entire project. Dr. Dunn provided group and one-on-one training whenever new counselors were hired. He also conducted fidelity monitoring at all sites during the implementation phase of the project.

During the course of this project, Dr. Dunn trained all of the CDPs how to use standard screening tools to identify potential risk for substance disorders among emergency department patients. He also trained the counselors in the use of motivational interviewing techniques in brief interventions and brief treatment sessions in order to motivate patients to modify their behavior and to act upon referrals to treatment. Dr. Dunn provides similar trainings nationwide and employs these techniques routinely in his own clinical practice at Harborview Medical Center.

As a culmination of Dr. Dunn’s training program for the WASBIRT Project, he prepared an SBIRT training manual for staff in acute care medical settings. The manual reflects Dr. Dunn’s expertise in training clinicians how to incorporate screening into acute clinical care and how to use motivational interviewing techniques to provide feedback to patients when conducting brief interventions in emergency departments and trauma centers.

As a result of Dr. Dunn’s extensive experience as a trainer in this field, the training manual that he prepared as a final product of the WASBIRT project is clear and easy to use. The Division of Behavioral Health and Recovery anticipates using this manual to train professionals throughout the state in the use of SBIRT for patients, particularly in acute care medical settings, although the manual would also be very useful to those who plan to provide SBIRT services in primary care as well. A copy of this manual is attached (see Appendix C) and is available at [http://www.dshs.wa.gov/pdf/hrsa/dasa/SBIRT_TrainManual2010.pdf](http://www.dshs.wa.gov/pdf/hrsa/dasa/SBIRT_TrainManual2010.pdf).

**GOAL 3 | Provide brief treatment (BT) on an outpatient basis at certified treatment agencies.**

To ensure that brief treatment would be readily available for patients upon referral, the WASBIRT program was designed so that CD treatment agencies or behavioral health units within participating hospitals hired chemical dependency counselors to perform this function. In four of the six counties, separate counselors were hired full-time as brief therapists serving only WASBIRT clients. In one county, three of the four counselors who conducted screenings and brief interventions in the hospital also provided brief therapy at the affiliated CD treatment agency. In the remaining county, WASBIRT clients who received brief treatment were incorporated into the caseload of existing counselors who received
specific training on brief therapy using motivational interviewing techniques. In this county, brief treatment for WASBIRT clients was reimbursed with grant funding on a fee-for-service basis. Overall, about one in five patients who were referred to brief treatment subsequently went to at least one brief therapy session. At one site with very strong outreach protocols, one in three patients referred to brief treatment went to at least one session. The average number of sessions was four, with a maximum of 12 sessions at most of the participating sites.

According to the Center for Substance Abuse Treatment’s definition, brief treatment is “a systematic, focused process that relies on assessment, client engagement, and rapid implementation of change strategies.”¹ In Washington State, the counselors who provided brief treatment were trained to use motivational interviewing techniques to help clients identify and achieve rapid behavioral change. During the process of providing brief therapy, counselors were also expected to identify the potential need for traditional CD treatment and to help clients obtain access to such treatment, as needed. To examine whether or not brief treatment appeared to improve the likelihood of entering CD treatment, the WASBIRT Evaluation Project conducted two separate analyses: (1) entrance to CD treatment within 90 days of receiving a brief intervention among WASBIRT patients at all sites who were covered by Medicaid and a similar type of state-funded medical assistance program (see Appendix D), and (2) admissions to CD treatment within one year of receiving a brief intervention among WASBIRT patients at Harborview Medical Center who were uninsured or on Medicaid or the state-funded medical assistance program (see Appendix E, page 7).

As shown in the charts below, the likelihood of entering CD treatment was much higher among patients who received brief treatment in addition to a brief intervention compared to patients who received only a brief intervention. These results were based on regression analyses in which substance abuse risk scores, demographic characteristics, prior substance abuse, mental health, and physical health indicators were taken into account. While the two sets of analyses used somewhat different outcome periods and variations in some of the prior health indicators, the results were remarkably similar. The findings of both analyses suggest that brief treatment may be an important means for facilitating entrance to CD treatment among patients at higher substance abuse risk levels.

**RECENT FINDINGS: Patients participating in brief treatment in addition to receiving a brief intervention were more likely to be admitted to chemical dependency treatment**

**ALL WASBIRT SITES | MEDICAID AND STATE-FUNDED**

Medicaid patients screened in the WASBIRT project were more likely to enter chemical dependency treatment after receiving a brief intervention (BI) and brief treatment than those at comparable risk levels who only got a BI

<table>
<thead>
<tr>
<th>Percent entering CD treatment in 90 days of receiving a BI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brief Intervention Only</td>
</tr>
<tr>
<td>Brief Intervention + Brief Treatment</td>
</tr>
</tbody>
</table>

**ODDS RATIO: **3.04  
**p = <0.001**

**HARBORVIEW MEDICAL CENTER | LOW INCOME**

HMC patients who received brief treatment in addition to a BI were more likely to be admitted to CD treatment in the following year than similar patients who received a BI and were referred to but did not engage in brief treatment

<table>
<thead>
<tr>
<th>Percent entering CD treatment in 1 year of receiving a BI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brief Intervention Only</td>
</tr>
<tr>
<td>Brief Intervention + Brief Treatment</td>
</tr>
</tbody>
</table>

**52%**

**Regression Adjusted**


¹ Center for Substance Abuse Treatment, Government Performance and Results Act (GPRA) Client Outcome Measures for Discretionary Programs, Question-by-Question Instruction Guide, Substance Abuse and Mental Health Services Administration, June 2005, p.3.
GOAL 4 | Increase referrals to certified treatment agencies of chemically dependent persons from generalist medical settings.

The WASBIRT Project was designed to provide a particularly strong model for improving both referrals to chemical dependency treatment and actual engagement in such treatment programs. In particular, the use of chemical dependency counselors to screen patients and provide brief interventions and referrals was intended to improve the effectiveness of the referral process. These counselors were based in either CD treatment agencies or in behavioral health units within one of the hospitals, and they typically had a priori experience in working within the chemical dependency treatment system. Most WASBIRT CDPs had extensive knowledge of the local CD treatment system and how to get people admitted into treatment. A number of tactics were used to assist in the referral and engagement process, including regular staff meetings of counselors who provided brief treatment with those who screened and made referrals; established procedures for scheduling brief treatment appointments for patients after a brief intervention session; calling patients before scheduled appointments; and, at one site, using the same counselors who did the screenings and brief interventions in the hospital to provide brief treatment at the outpatient clinic. Overall, WASBIRT counselors made 16,928 referrals to brief treatment and/or CD treatment.

The WASBIRT Evaluation Project was designed to assess whether or not WASBIRT improved the rate at which patients were admitted to subsequent CD treatment. Two separate sets of analyses were conducted: (1) an examination of the degree to which Medicaid patients entered CD treatment within 90 days after receiving a brief intervention at any of the nine hospitals participating in WASBIRT and (2) an analysis of admissions to CD treatment within one year after receiving a brief intervention among Medicaid and low-income, uninsured patients at Harborview Medical Center. Both sets of these analyses produced positive results that show the potential impact of SBIRT on admission to CD treatment.

Entrance into Chemical Dependency Treatment among Medicaid Patients, All WASBIRT Sites

Medicaid and other low-income patients who received at least a brief intervention at the nine WASBIRT hospitals were much more likely to enter CD treatment within 90 days of the intervention than patients in statistically matched groups who were not screened. The odds of entering CD treatment within 90 days of an emergency department visit were more than twice as high for patients who received a brief intervention during their visit compared very similar patients who did not. These results were found in three separate medical coverage groups: the working-age disabled covered by Medicaid, the working-age disabled covered by a state-funded General Assistance Program for the Unemployed, and patients with families covered under Temporary Assistance for Needy Families (see Appendix D).

RECENT FINDINGS: Patients who received at least a brief intervention were more likely to enter CD treatment than similar emergency department patients who received no screening or intervention for substance use disorders

<table>
<thead>
<tr>
<th>WORKING AGE DISABLED</th>
<th>GENERAL ASSISTANCE-UNEMPLOYABLE</th>
<th>TEMPORARY ASSISTANCE FOR NEEDY FAMILIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odds of entering CD treatment within 90 days of receiving a Bi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WORKING AGE DISABLED</td>
<td>GENERAL ASSISTANCE-UNEMPLOYABLE</td>
<td>TEMPORARY ASSISTANCE FOR NEEDY FAMILIES</td>
</tr>
<tr>
<td>Odds of entering CD treatment within 90 days of receiving a Bi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.62</td>
<td>3.19</td>
<td>3.24</td>
</tr>
<tr>
<td>4.7%</td>
<td>5.8%</td>
<td>2.3%</td>
</tr>
<tr>
<td>p &lt; .0001</td>
<td>p &lt; .0001</td>
<td>p &lt; .0001</td>
</tr>
</tbody>
</table>

SOURCE. Estee, et al. Impact of Screening, Brief Intervention, and Referral to Treatment on Entrance to Chemical Dependency Treatment: Medicaid Patients Screened In Hospital Emergency Departments. Washington State Department of Social and Health Services, Research and Data Analysis Division, February 2010.

The results of these analyses have been presented in a fact sheet published on the Research and Data Analysis Division’s website at [http://www.dshs.wa.gov/rda/](http://www.dshs.wa.gov/rda/) (see Appendix D). An article that will be submitted to a professional journal is in progress.
Admissions to Chemical Dependency Treatment among Medicaid and Uninsured Patients, Harborview Medical Center

**RECENT FINDINGS:** Patients at Harborview Medical Center who received at least a brief intervention were more likely to enter CD treatment than similar emergency department patients who received no screening or intervention for substance use disorders.

Patients at Harborview Medical Center who received at least a brief intervention were significantly more likely to be admitted to CD treatment within the following year compared to similar emergency department patients who were not screened and did not receive an intervention for substance abuse from WASBIRT counselors.

Analyses were based on a quasi-experimental design using hospital medical records to select a comparable set of hospital emergency department patients with evidence of possible substance use disorders to those who received at least a BI through WASBIRT.

The results of these analyses, prepared by researchers at the University of Washington Harborview Medical Center, in collaboration with the WASBIRT Evaluation team at the Washington State Department of Social and Health Services, have been published in *Drug and Alcohol Dependence* (see Appendix E). These findings suggest the importance of including screening, brief interventions, and referrals to treatment in emergency departments as a means of improving subsequent admissions to CD treatment among patients who need this form of treatment.

**GOAL 5 | Reduce subsequent ED utilization, medical costs, criminal behavior, disability, and deaths of patients with alcohol and drug problems of all severity levels.**

The evaluation of the WASBIRT Project conducted by the DSHS Research and Data Analysis Division relied upon analyses of the six-month follow-up GPRA survey, state-level administrative data and medical payment records. Analyses provided evidence of reduced substance use, lower medical costs for Medicaid clients, less involvement in criminal activities, improved employment activity, and lower death rates among high-risk patients. Subsequent emergency department utilization, however, appeared to increase among patients who received at least a brief intervention based on those receiving medical coverage through state and federal programs for working age, disabled people or families with low income.

**Reduced Substance Use for Patients from All WASBIRT Sites**

Receiving an intervention through the WASBIRT program was associated with significant positive changes in recent alcohol or other drug use including significant decreases in average days of alcohol use, binge drinking, and drug use. In addition, engaging in additional therapy through brief treatment or standard CD treatment was associated with even greater declines in alcohol and drug use and increases in abstinence from both alcohol and other drugs. Comparable results were found in changes in substance use by patients at each of the WASBIRT sites, when analyzed separately. These analyses are based on the comparison of baseline substance use data with data from the six-month follow-up survey. The report for all WASBIRT sites was based on a sample of 5,598 patients who were selected out of 30,210 patients with moderate or high risks for substance use disorders. Interviews were completed with 4,168 of the patients in the sample, which represents a 79 percent response rate. (See Appendix F for fact sheets prepared for all WASBIRT sites combined and for individual site, which are also published on the Research and Data Analysis Division website at [http://www.dshs.wa.gov/rda/](http://www.dshs.wa.gov/rda/).)
**RECENT FINDINGS:** Average days of alcohol use, binge drinking, and use of other drugs declined six months after receiving a brief intervention

<table>
<thead>
<tr>
<th>ALCOHOL USE</th>
<th>BINGE DRINKING</th>
<th>DRUG USE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average number of days in the past 30 days</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before Brief Intervention*</td>
<td>Before Brief Intervention + BT/CD Tx*</td>
<td>Before Brief Intervention + BT/CD Tx*</td>
</tr>
<tr>
<td>7.4</td>
<td>4.4</td>
<td>3.3</td>
</tr>
<tr>
<td>After Brief Intervention*</td>
<td>After Brief Intervention + BT/CD Tx*</td>
<td>After Brief Intervention + BT/CD Tx*</td>
</tr>
<tr>
<td>4.4</td>
<td>3.3</td>
<td>2.7</td>
</tr>
</tbody>
</table>

**RECENT FINDINGS:** Percentage of patients who were abstinent from alcohol or other drugs increased six months after receiving a brief intervention

- Receiving a brief intervention through the WASBIRT program was associated with significant increases in abstinence from alcohol and from drug use.
- Similar results occurred for patients who received a BI plus brief treatment and/or CD treatment.

**SOURCE.** Estee, et al. Substance Use Outcomes for All WASBIRT Hospitals. Washington State Department of Social and Health Services, Research and Data Analysis Division, September 2009.

*p < .05

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**Reduction in Medical Costs, per member per month, for Medicaid Clients**

- Medicaid costs among working age, disabled clients were $366 lower per member per month (pmpm) (p = .05) for those who received at least a brief intervention compared to a statistically matched sample of clients who were treated in an emergency department but did not get a brief intervention through WASBIRT. The relative decline appeared to be due to a decline in inpatient costs for stays that originated in an emergency department visit. The primary factor contributing to reduced costs appeared to be a reduction of 0.12 pmpm inpatient hospital days (p = .04) which equals a reduction of roughly 1.2 hospital days per person per year. These results have been published in Medical Care (see Appendix G).
Social and Mental Health Outcomes

The WASBIRT Evaluation Project examined the degree to which hospital emergency department patients experienced changes in important social and mental health indicators six months after receiving a brief intervention for substance use disorders. Some of the patients also received additional counseling through brief treatment using motivational interviewing techniques, CD treatment or both. Among patients with higher levels of substance abuse risk (i.e., AUDIT score of 16 or above or DAST-10 score of 5 or above), we found that six months after receiving at least a brief intervention there were:

- Fewer arrests among those who also got brief treatment and/or CD treatment
- Fewer patients living in homeless shelters or outdoors
- Higher rates of full- or part-time employment
- Decreased rates of anxiety
- Lower rates of depression

**RECENT FINDINGS: Social outcomes improved**

<table>
<thead>
<tr>
<th>PATIENTS ARRESTED</th>
<th>LIVING IN HOMELESS SHELTERS OR OUTDOORS</th>
<th>EMPLOYED FULL-TIME OR PART-TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Percent of patients in the past 30 days</strong></td>
<td><strong>Percent of patients in the past 30 days</strong></td>
<td><strong>Percent of patients in the past 30 days</strong></td>
</tr>
<tr>
<td><strong>BEFORE</strong></td>
<td><strong>AFTER</strong></td>
<td><strong>BEFORE</strong></td>
</tr>
<tr>
<td>Brief Intervention</td>
<td>8%</td>
<td>7%</td>
</tr>
<tr>
<td>Brief Intervention + BT/CD Tx*</td>
<td>8%</td>
<td>7%</td>
</tr>
</tbody>
</table>

**RECENT FINDINGS: Mental health problems decreased**

<table>
<thead>
<tr>
<th>DECREASED ANXIETY</th>
<th>REDUCED DEPRESSION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Percent of patients in the past 30 days</strong></td>
<td><strong>Source:</strong> Washington State Department of Social and Health Services, Research and Data Analysis Division, May 2010.</td>
</tr>
<tr>
<td><strong>BEFORE</strong></td>
<td><strong>AFTER</strong></td>
</tr>
<tr>
<td>Brief Intervention*</td>
<td>61%</td>
</tr>
<tr>
<td>Brief Intervention + BT/CD Tx*</td>
<td>56%</td>
</tr>
</tbody>
</table>

Deaths among Working Age, Disabled Medicaid Clients

Analyses completed as part of the evaluation of WASBIRT Project outcomes found a statistically significant lower death rate among working age, disabled Medicaid clients who received at least a brief intervention compared to a one-to-one matched set of similar clients who were treated in an emergency department but were not screened by WASBIRT counselors. The death rate in the year after being screened by WASBIRT was 47.1 per 1000 for 2,465 Medicaid patients who received at least a brief intervention compared to 60.9 per 1000 for patients in the statistically matched comparison group. The adjusted odds ratio was 0.705 (p < .01) based on a model that included a number of prior risk factors related to substance abuse, mental health, treatment for injuries, and other health-related issues. The WASBIRT evaluation team will present these analyses in a paper that will be submitted to a peer-reviewed journal.
Clinical Indicators of Substance Use Problems Relative to Screening Scores

The WASBIRT evaluation relied heavily on clinical indicators of substance use problems as well as other health issues to construct statistically matched samples of patients for outcome analyses in several of the research papers described above. Therefore, the evaluation team examined the relationship between the clinical indicators from medical claims data and other administrative records relative to the screening scores of patients who participated in the WASBIRT project. The analyses examined how well alcohol or drug (AOD)-related administrative indicators predicted self-reported AOD use based on screening scores obtained from the Alcohol Use Disorders Identification Test (AUDIT) and the Drug Abuse Screening Test (DAST-10).

Administrative records were from Medicaid data, Harborview Medical Center medical records, publicly funded chemical dependency treatment data, and statewide arrest data. Data from these sources were used by the WASBIRT evaluation teams at the University of Washington (UW) and the state’s Department of Social and Health Services (DSHS) to create indicators of potential AOD problems. These AOD indicators were found to discriminate, at acceptable statistical levels, self-reported AOD use that indicated the potential need for moderate or more intensive levels of intervention.

These analyses may be useful to other SBIRT evaluators interested in using similarly created administrative indicators of the potential need for AOD interventions in their own research. Administrative AOD-need flags could be useful for selecting comparison groups using propensity score matching methodology. The analyses of the WASBIRT evaluation team help to demonstrate the validity of the AOD indicators created from administrative data, and we expect to continue using these indicators in our other research and policy development.

The results of the analyses will be published in Drug and Alcohol Dependence (see Appendix H).

GOAL 6 | Involve a multitude of perspectives to explore systems change to improve existing linkages to these services and to expand substance abuse services to include early intervention.

New Certified Service: Screening and Brief Intervention (SBI)

In describing this goal in more detail, the WASBIRT Action Plan also stated that, “By conclusion of the WASBIRT Center for Substance Abuse Treatment (CSAT) grant, expected results include brief intervention and brief treatment will be included in the Washington State continuum of care, per Washington Administrative Code (WAC) 388-805, and redirection of fund streams benefiting from WASBIRT to sustain these services.”

The Department of Social and Health Services, Division of Behavioral Health and Recovery (DBHR) revised Washington Administrative Code (WAC) 388-805 effective January 1, 2009, to include the new certified service of Screening and Brief Intervention (SBI). SBI is defined in Section 005, described in Section 010, and specific requirements for SBI services are listed in Section 855. WAC 388-805 is located at: http://apps.leg.wa.gov/wac/default.aspx?cite=388-805. (See Appendix I for copies of Sections 005, 010, and 855 which contain details pertaining to the SBI services.)

DBHR decided to develop this new certified service—SBI—in order to put in place regulations to ensure consistency within the chemical dependency field for agencies that want to provide this service. In addition, when reimbursement mechanisms for SBI services are in place, agencies would be able to bill for DBHR-certified services.

In the last year, the DBHR Director of Certification Services, Dennis Malmer, who was the initial Project Director for WASBIRT, has worked with the Medical Director for Washington State’s Medicaid Program to include SBI service within the state’s Medicaid Plan. If the proposed change is approved by the Center for Medicaid and Medicare Services, this will be an essential step toward enabling SBIRT services to be part of the state’s Medicaid reimbursement system in the future.
WASBIRT Project Achievements that Contribute to Systems Change

The Division of Behavioral Health and Recovery (DBHR) is continuing to develop long-term, state-level support for SBIRT services. The most notable achievements of the WASBIRT Project toward long-term systems change could eventually lead to the inclusion of screening, brief intervention, and referral to treatment in more medical care settings.

During the close-out period, DBHR completed a number of activities that should contribute to the systems changes envisioned under the SBIRT initiative in Washington State (see Appendix J for the No-Cost Extension Final Report, April 1, 2009 through September 30, 2009).

The major accomplishments of the project during the no-cost extension period are:

- Modification of Washington Administrative Code to include the new certified service of Screening and Brief Intervention.
- Completion of the SBIRT training manual for providers in acute care settings.
- Continuation of locally funded SBIRT services by a number of the hospitals that participated in the WASBIRT project and expansion of these services to several more hospitals in King County.
- Publication of several papers in peer-reviewed journals demonstrating that SBIRT improves admissions to chemical dependency treatment and is associated with lower medical costs for high-cost, fee-for-service Medicaid clients.
- Continued collaboration with the Washington State Medicaid Program to develop a Medicaid state plan amendment that will include SBI services.

Among the most important achievements of the project was the successful continuation of SBIRT services at several of the hospitals that participated in this project. Following is a brief summary of the status of SBIRT services in the six counties that participated in the WASBIRT project:

- **Clark County**—Southwest Washington Medical Center dedicated hospital funds to pay for two CDP positions to continue SBIRT services.
- **King County**—Funding was obtained from a locally enacted excise tax directed toward behavioral health services to maintain SBIRT services in the emergency department of Harborview Medical Center and to create similar programs in several other community hospitals in that county.
- **Pierce County**—Tacoma General Hospital dedicated hospital funds to pay for two CDP positions to continue SBIRT services.
- **Snohomish County**—Providence Everett Medical Center maintained SBIRT services on a limited basis provided to patients who are hospitalized by using several existing staff in their Behavioral Health Services Department. At this time, an SBIRT project at Providence Everett Medical Center is under consideration by a managed care provider that oversees an integrated care management project for Medicaid patients in this county.
- **Thurston County**—Providence St. Peter Hospital hired three of the four WASBIRT CDPs to work in their emergency department crisis intervention unit to address substance abuse issues and assist in discharge planning. This hospital did not, however, retain a formal SBIRT service but did choose to include counselors with expertise in motivational interviewing and brief intervention as part of their acute care, crisis intervention medical team.
- **Yakima County**—The hospitals that participated in WASBIRT in this county did not continue any SBIRT-related services after the project ended in the fall of 2008.

Thus, of the six counties that participated in WASBIRT, three continued SBIRT services using local funding, one may be able to do so through the efforts of a local managed care provider, and one incorporated the staff who provided SBIRT services into their hospital crisis intervention team. Only one county was unable to provide support for local continuation of SBIRT services despite interest by a number of the hospitals and CD treatment agencies that collaborated in the overall project and despite favorable outcomes demonstrated for their patients who received SBIRT services through this project.
DBHR supports the use of SBIRT in medical care settings and has identified this as one of their long-term strategies for reducing the effects of substance abuse within the state. Unfortunately, the current economic conditions of Washington State’s economy and the fairly bleak revenue forecast for this state have made it impossible to incorporate funding for any SBIRT programs in the state’s budget. Nonetheless, DBHR has enacted a change to the state’s administrative code in order to certify screening and brief intervention services so that they can be included in the continuum of care. DBHR also plans to broadly disseminate the recently completed SBIRT training manual developed by Dr. Dunn for this project so that medical practitioners, particularly in acute medical care settings, can learn how to incorporate basic screening and brief intervention skills into their medical practice. Finally, DBHR has begun the necessary steps to include SBIRT in the Medicaid plan for this state.

With the benefit of the SAMHSA-funded SBIRT project, Washington State was able to accomplish the goals set forth in its initial action plan. The WASBIRT project was successfully implemented in nine separate hospitals. It completed more than 104,000 screenings for substance abuse among hospital emergency department patients. The receipt of brief interventions and, in some cases, brief treatment and/or CD treatment was associated with declines in substance use, reductions in medical costs for fee-for-service Medicaid clients, improvements in social outcomes such as fewer arrests and more employment, and lower death rates among working age, disabled Medicaid patients. Brief interventions and brief treatment also appeared to be related to significant increases in admissions to CD treatment both at a large, urban hospital and among Medicaid clients at all nine sites.

Finally, at the state and at several of the participating hospitals, a number of initiatives demonstrate solid steps have been taken toward achieving the desired systems change leading to the adoption of SBIRT within medical care settings particularly for emergency care.
Washington State Screening, Brief Intervention, and Referral to Treatment Program

Final Program Performance Report: October 1, 2003 through September 30, 2009