Washington State Institute for Public Policy

Benefit-Cost Results

Family Behavior Therapy (FBT)

Benefit-cost estimates updated July 2015. Literature review updated May 2014.

Current estimates replace old estimates. Numbers will change over time as a result of model inputs and monetization methods.

The WSIPP benefit-cost analysis examines, on an apples-to-apples basis, the monetary value of programs or policies to determine whether the benefits from the program exceed its costs. WSIPP's research approach to identifying evidence-based programs and policies has three main steps. First, we determine "what works" (and what does not work) to improve outcomes using a statistical technique called meta-analysis. Second, we calculate whether the benefits of a program exceed its costs. Third, we estimate the risk of investing in a program by testing the sensitivity of our results. For more detail on our methods, see our technical documentation.

Program Description: Family Behavior Therapy is a standalone behavioral treatment based on the Community Reinforcement Approach aimed at reducing substance use. Participants attend sessions with at least one family member, typically a parent or cohabitating partner. The treatment consists of several parts including behavioral contracting, skills to reduce interaction with individuals and situations related to drug use, impulse and urge control, communication skills, and vocational or educational training. Our findings reflect only adults treated in the program and exclude results for adolescents.

Benefit-Cost Summary

Program benefits	
Participants	$2,333
Taxpayers	$1,901
Other (1)	$1,168
Other (2)	$4,057
Total	$9,458
Costs	($1,873)
Benefits minus cost	$7,586

Summary statistics	
Benefit to cost ratio	$5.05
Benefits minus costs	$7,586
Probability of a positive net present value	61 %

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2014). The economic discount rates and other relevant parameters are described in our technical documentation.

Detailed Monetary Benefit Estimates

Source of benefits	Benefits to Participants	Taxpayers	Other (1)	Other (2)	Total benefits
From primary participant					
Crime	$0	$124	$413	$62	$600
Labor market earnings (illicit drug abuse/dependence)	$2,187	$933	$0	$4,514	$7,634
Health care (illicit drug abuse/dependence)	$145	$843	$755	$420	$2,163
Adjustment for deadweight cost of program	$0	$0	$0	($939)	($938)
Totals	$2,333	$1,901	$1,168	$4,057	$9,458

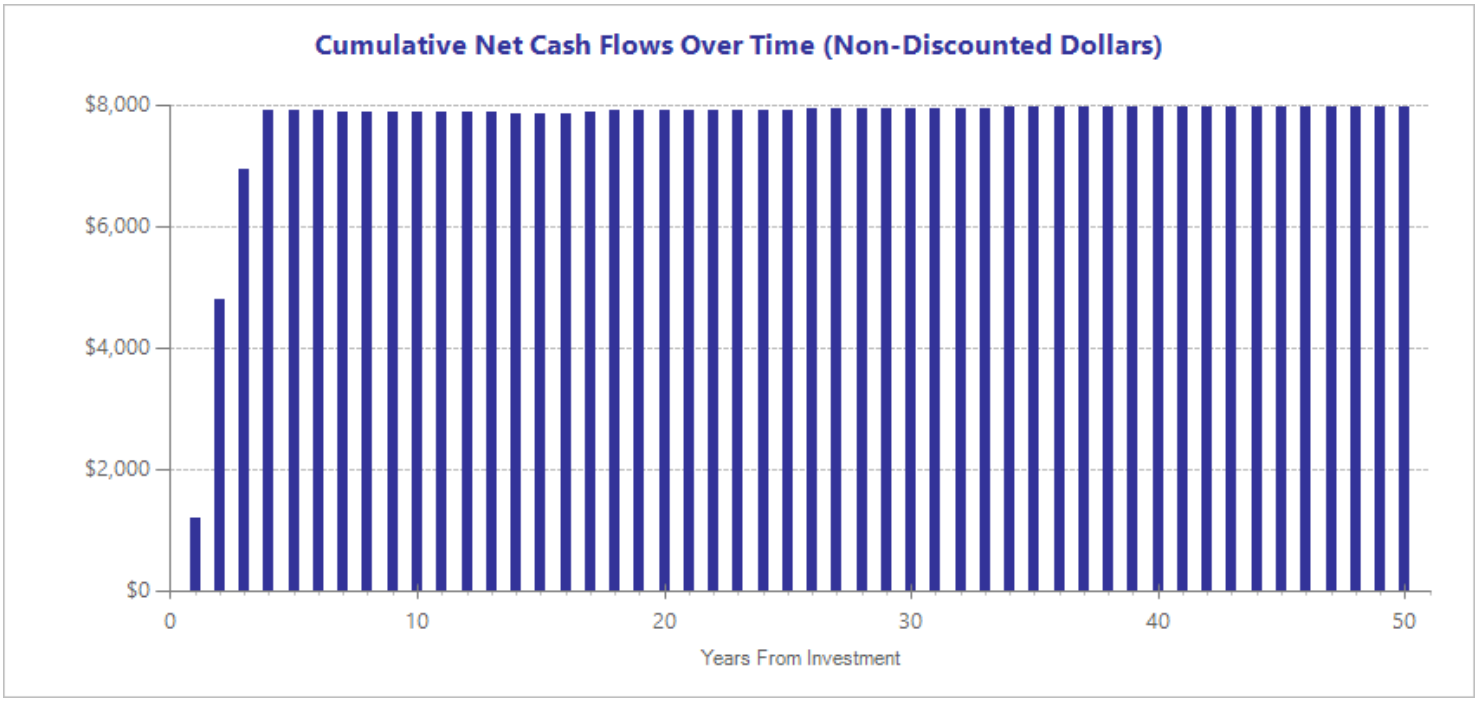
We created the two “other” categories to report results that do not fit neatly in the “participant” or “taxpayer” perspectives. In the “Other (1)” category we include the benefits of reductions in crime victimization, the economic spillover benefits of improvement in human capital outcomes, and the benefits from private or employer-paid health insurance. In the “Other (2)” category we include estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

Detailed Cost Estimates

	Annual cost	Program duration	Year dollars	Summary statistics	
Program costs	$3,698	1	2013	Present value of net program costs (in 2014 dollars)	($1,873)
Comparison costs	$1,851	1	2013	Uncertainty (+ or - %)	10 %

The cost of treatment is based on this single study and includes one-hour of weekly individual counseling for 12 months estimated using Washington’s current Medicaid hourly reimbursement rate for individual treatment. Comparison group costs incurred in this single study included the cost of a two-hour weekly group session for 12 months estimated using Washington’s current Medicaid hourly reimbursement rate for group treatment.

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta analysis. The uncertainty range is used in Monte Carlo risk analysis, described in our technical documentation.



Meta-Analysis of Program Effects

Outcomes measured	Primary or secondary participant	No. of effect sizes	Treatment N	Unadjusted effect size (random effects model)		Adjusted effect sizes and standard errors used in the benefit-cost analysis					
						First time ES is estimated			Second time ES is estimated		
				ES	p-value	ES	SE	Age	ES	SE	Age
Illicit drug abuse or dependence	Primary	1	38	-0.670	0.008	-0.670	0.251	31	0.000	0.187	34

Citations Used in the Meta-Analysis

Azrin, N.H., McMahon, P.T., Donahue, B., Besalel, V., Lapinski, K.J., Kogan, E.S., Acierno, R.E., & Galloway, E. (1994). Behavior Therapy for Drug Abuse: A Controlled Treatment Outcome Study. *Behavioral Research and Therapy, 32*(8), 857-866.

For further information, contact:
(360) 586-2677, institute@wsipp.wa.gov

Printed on 11-08-2015