

Using the Washington State Institute for Public Policy to Determine the Cost Benefit of an Evidence-Based Program

Programs often generate financial benefits in the form of reduced utilization of taxpayer-funded resources (like court and juvenile justice costs), improved labor market outcomes, and more. Calculating cost-benefit depends upon a rigorous evidence base for the program you wish to analyze. **Before proceeding check to be sure benefit information is available for your program.** [The Washington State Institute for Public Policy](#) has calculated the estimated financial benefit associated with a number of evidence based programs.

Why Should You Perform a Cost-Benefit Analysis?

Cost benefit calculations are extremely beneficial in a variety of situations:

- **Applying for funding.** Grant sources like PCCD strive to make responsible use of taxpayer dollars, so citing the economic benefits of your program can give your application an edge.
- **Making the case for expanded support.** Show potential funders how an increase in your operating budget can result in impressive financial gains.
- **Communicating benefits of your program to community members.** Maintaining community support and stakeholder buy-in is simpler if you can also reference the economic benefits of your program.

How to Perform a Basic Cost-Benefit Analysis

To perform these calculations, you will need to collect a few basic values:

- **Program Cost:** This value may reflect your actual operating budget for the program, or an estimate of your expected budget.
- **Number of Participants:** This may be the actual number of children or families served by your program, or an estimate of the number you expect to serve.
- **Benefit:** [The Washington State Institute for Public Policy](#) has calculated the estimated financial benefit associated with a number of evidence based programs.

To arrive at an estimate of the projected savings generated by a program, multiply the estimated savings by the number of participants in your program, and then subtract the cost of the program:

$$(\text{Benefit} \times \text{Number of Participants}) - \text{Program Cost} = \text{Total Net Benefit}$$

Suppose your program has an estimated benefit of \$10,000 per person. If you treat 50 people and your program budget is \$200,000, your equation would look like this:

$$(\$10,000 \times 50) - \$200,000 = \text{Total Net Benefit}$$

or

$$\$300,000 = \text{Total Net Benefit}$$

Additional Calculations

Other cost-benefit calculations can be helpful in different circumstances.

Benefit per person/family served

In the example above, each person served by the program generates \$6000 in savings.

$$\text{Total Net Benefit} \div \text{Number of Participants} = \text{Net Benefit per Unit Served}$$
$$\$300,000 \div 50 = \$6,000 = \text{Net Benefit per Unit Served}$$

Cost-benefit ratio

Every dollar invested in this implementation yields \$2.50 in cost savings.

$$(\text{Benefit} \times \text{Number of Participants}) \div \text{Program Cost} = \text{Benefit per \$1 Invested}$$
$$(\$10,000 \times 50) \div \$200,000 = \$2.50 = \text{Benefit per \$1 Invested}$$

Where do you find the cost-benefit for your program?

Visit <http://www.wsipp.wa.gov/BenefitCost> and look for the **Total Benefits** column:

Program name <small>(click on the program name for more detail)</small>	Date of last literature review	Total benefits	Taxpayer benefits	Non-taxpayer benefits	Costs	Benefits minus costs (net present value)	Benefit to cost ratio	Chance benefits will exceed costs
Family-based therapy (Parenting with Love and Limits model)	Jun. 2016	\$34,691	\$9,252	\$25,438	(\$1,688)	\$33,004	\$20.56	98 %
Functional Family Therapy (youth in state institutions)	Dec. 2014	\$32,150	\$7,833	\$24,317	(\$3,427)	\$28,723	\$9.38	99 %
Education and Employment Training (EET, King County)	Dec. 2015	\$26,708	\$7,279	\$19,429	(\$855)	\$25,853	\$31.24	100 %
Functional Family Therapy (youth on probation)	Dec. 2014	\$22,316	\$6,451	\$15,864	(\$3,427)	\$18,889	\$6.51	99 %
Mentoring	Jun. 2014	\$21,283	\$5,936	\$15,347	(\$3,260)	\$18,022	\$6.53	87 %

IMPORTANT NOTE: In many cases, the **Total benefits** figure refers to the cost savings per person receiving treatment. Programs directed at families will generally state benefits on a “per family” basis. If you are uncertain how this applies in your program, contact the EPISCenter.

Example

Suppose you have an operating budget of \$200,000 to implement *Functional Family Therapy (youth on probation)* for 100 participants. According to Washington State Institute for Public Policy estimates, the program generates \$22,316 in benefits per participant.

How much will the implementation save, after program costs?

$$(\$22,316 \times 100) - \$200,000 = \$2,031,600 = \text{Total Net Benefit}$$

What are the cost savings, per participant, after program costs?

$$\$2,031,600 \div 100 = \$20,316 = \text{Net Benefit per Unit Served}$$

What is the cost-benefit ratio for the implementation?

$$(\$22,316 \times 100) \div \$200,000 = \$11.16 = \text{Benefit per \$1 Invested}$$

Example Applications

You can calculate cost benefits for your program in a number of ways to suit different applications:

- **Illustrate anticipated cost-benefits before receiving funding.** Use estimated operating costs- either from a proposed budget or from the program cost estimates from the Washington Institute for Public Policy chart- and anticipated number of program participants to calculate benefits when making the case for initial funding.
- **Demonstrate the benefits of additional funding.** Program overhead costs can eat up a disproportionate percentage of a bare-bones budget. Use these formulas to show how a modest increase in funding can result in a relatively large increase in the number of kids served.
- **Recalculate increased savings of a sustained program.** It generally costs more to start a program than it does to keep it running. Be sure to recalculate cost benefits to reflect the increase in benefit when transitioning to a sustainability budget.