Cost Benefits of Evidence-Based Programs

With evidence-based programs, we tend to focus on a program’s effectiveness in addressing various public health and safety concerns. However 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.

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.*

**Cost-benefit ratio**

*Every dollar invested in this implementation yields $2.50 in cost savings.*
Where do you find the cost-benefit for your program?

Visit [http://www.wsipp.wa.gov/BenefitCost](http://www.wsipp.wa.gov/BenefitCost) and look for the **Total Benefits** column:

<table>
<thead>
<tr>
<th>Program name (click on the program name for more detail)</th>
<th>Date of last literature review</th>
<th>Total Benefits</th>
<th>Taxpayer benefits</th>
<th>Non-taxpayer benefits</th>
<th>Costs</th>
<th>Benefits minus costs (net present value)</th>
<th>Benefit to cost ratio</th>
<th>Chance benefits will exceed costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family-based therapy (Parenting with Love and Limits model)</td>
<td>Jun. 2016</td>
<td>$34,691</td>
<td>$9,252</td>
<td>$25,439</td>
<td>$(1,668)</td>
<td>$33,004</td>
<td>203.36</td>
<td>98 %</td>
</tr>
<tr>
<td>Functional Family Therapy (youth in state institutions)</td>
<td>Dec. 2014</td>
<td>$33,150</td>
<td>$7,833</td>
<td>$24,317</td>
<td>$(5,427)</td>
<td>$28,723</td>
<td>98.98</td>
<td>99 %</td>
</tr>
<tr>
<td>Education and Employment Training (EET, King County)</td>
<td>Dec. 2015</td>
<td>$26,708</td>
<td>$7,279</td>
<td>$19,429</td>
<td>$(5,355)</td>
<td>$25,853</td>
<td>231.24</td>
<td>100 %</td>
</tr>
<tr>
<td>Functional Family Therapy (youth on probation)</td>
<td>Dec. 2014</td>
<td>$22,316</td>
<td>$6,451</td>
<td>$15,864</td>
<td>$(3,427)</td>
<td>$18,889</td>
<td>56.51</td>
<td>99 %</td>
</tr>
<tr>
<td>Mentoring</td>
<td>Jun. 2014</td>
<td>$21,268</td>
<td>$5,956</td>
<td>$15,314</td>
<td>$(3,260)</td>
<td>$18,022</td>
<td>66.53</td>
<td>87 %</td>
</tr>
</tbody>
</table>

**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 EPICenter.

**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?**

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

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

\[
\text{Net Benefit per Unit Served} = \frac{2,031,600}{100} = 20,316
\]

**What is the cost-benefit ratio for the implementation?**

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

**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.

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