

RESOURCES FOR COST ANALYSIS IN EVALUATION

Terms and Definitions^a

Term	Definition	Example outcome
Cost analysis	Measures costs of program implementation, but often includes monetary outcomes (i.e., benefits) resulting from program as well	<ul style="list-style-type: none"> • \$114 per client per day of outpatient services • Average of \$253 was spent per treatment participant
Cost-benefit analysis	Relationship between value of resources used by a program and value of resources produced by program; value is measured using the same units usually monetary, for both costs and benefits	<ul style="list-style-type: none"> • 2.1 ratio of benefits to costs after 1 year of program operation • Net \$126 per client per year • 44 minutes saved for every 10 minutes invested in prevention
Cost-effectiveness analysis	Relationship between value of resource used in program implementation and nonmonetary outcomes produced by program	<ul style="list-style-type: none"> • \$51 per opiate-free day • \$72 per pound lost and kept off for 6 months or more
Return on investment	Cost-benefit analysis in which programs are viewed as means of saving money or generating income	<ul style="list-style-type: none"> • \$1,111 spent per \$15,034 gain in lifetime earnings
Time to return on investment	Typical time elapsed between program operation and occurrence of program benefits	<ul style="list-style-type: none"> • 4.2 years until the \$1,557 spent in smoking prevention services per client pays for itself in reduced health care and other costs
Present value	Future costs and benefits, depreciated using one of several discount rates to reflect delayed value	<ul style="list-style-type: none"> • \$1,000 per year in saved medical expenses, over a 10-year period of program impact amounts to \$10,000 before present-valuing and \$7,722 after present-valuing, using a constant discount rate of .05
Sensitivity analysis	Examination of effects of varying specific assumptions on costs, benefits, effectiveness, and comparisons of these	<ul style="list-style-type: none"> • Present value of \$1,000 per year in saved expenses over 10 years of program exceeded program costs only at discount rates of .05 and lower
Comparison	Contrast of two or more programs' costs, benefits, effectiveness, cost-benefit ratios, net benefit, cost-effectiveness ratios, return on investment, or time to return on investment	<ul style="list-style-type: none"> • "Statistically significantly greater net benefit for clients receiving substance abuse treatment..." (when cost and benefit data are collected for individual clients)

^aTable adapted from Yates, 2009

Useful Resources

- Child Welfare Research and Evaluation Cost Workgroup. (2013). *Cost analysis in program evaluation: A guide for child welfare researchers and service providers*. Washington, DC: Children's Bureau, Administration for Children and Families, U.S. Department of Health and Human Services.
- Herman, P. M., Avery, D. J., Schemp, C. S., & Walsh, M. E. (2009). Are cost-inclusive evaluations worth the effort? *Evaluation and Program Planning*, 32(1), 55-61.
- Jepsen, C., Troske, K., & Coomes, P. (2014). The labor-market returns to community college degrees, diplomas, and certificates. *Journal of Labor Economics*, 32, 95-121.
- Levin, H. M. (2001). Waiting for Godot: Cost-effectiveness analysis in education. *New Directions for Evaluation*, 90, 55-68.
- Rogers, P. J., Stevens, K., & Boymal, J. (2009). Qualitative cost-benefit evaluation of complex, emergent programs. *Evaluation and Program Planning*, 32(1), 83-90.
- Sewell, M. & Marczak, M. (n.d.). *Using costs analysis in evaluation*. The University of Arizona. Retrieved from <http://ag.arizona.edu/sfcs/cyfernet/cyfar/Costben2.htm>
- Stewart, S. (2015). *Retention-revenue calculator*. The National STEM Consortium. Retrieved from <https://www.skillscommons.org/handle/taaccct/2534>
- Tsang, M. C. (1997). Cost analysis for improved educational policymaking and evaluation. *Educational Evaluation and Policy Analysis*, 19, 318-324.
- Yates, B. T. (2009). Cost-inclusive evaluation: A banquet of approaches for including costs, benefits, and cost-effectiveness and cost-benefit analyses in your next evaluation. *Evaluation and Program Planning*, 32, 52-54. Retrieved from http://brianyates.net/info/yates_banquet_of_approaches.pdf
- Yeh, S. S. (2009). Shifting the bell curve: The benefits and costs of raising student achievement. *Evaluation and Program Planning*, 32(1), 74-82.



Hezel Associates, 2015

© by Hezel Associates. Resources for Cost Analysis in Evaluation is made available under the Creative Commons 4.0 Attribution-NonCommercial-ShareAlike 4.0 International:
<https://creativecommons.org/licenses/by-nc-sa/4.0/>