

USING ECONOMIC EVIDENCE TO INFORM INVESTMENTS
IN CHILDREN, YOUTH, AND FAMILIES

COMMON QUESTIONS	TYPE OF ANALYSIS TO ANSWER QUESTION	REQUIREMENTS FOR COST ASSESSMENT	REQUIREMENTS FOR OUTCOME ASSESSMENT
<p>What is the cost of the resources to fully implement a given intervention for a specified time period?</p> <hr/>	<p>Cost analysis (CA)</p> <hr/>	<p>Comprehensive measure of the intervention's costs from a societal perspective^a</p> <hr/>	
<p>What is the cost to achieve a unit change in a given outcome (e.g., one more high school graduate) of an intervention?</p> <p>What is the amount of a given outcome generated per dollar spent to implement an intervention?</p> <hr/>	<p>Cost-effectiveness analysis (CEA)</p> <hr/>	<p>Comprehensive measure of the intervention's costs to society^a</p> <hr/>	<p>Measures of the intervention's impact at a given point in time in natural units</p> <p>Optionally, the monetary valuation of market outcomes</p> <p>Examination of one (or more) unmonetized outcome(s) at a time in a given natural unit</p> <hr/>
<p>What is the cost for an intervention to achieve a unit change in a given measure of quality of life (e.g., personal well-being)?</p> <p>What is the amount of quality of life (e.g., QALY or DALYs) generated per dollar spent to implement an intervention?</p> <hr/>	<p>CEA using a quality-of-life measure (also known as cost-utility analysis)</p> <hr/>	<p>Comprehensive measure of the intervention's costs to society^a</p> <hr/>	<p>Measures of the intervention's impact at a given point in time in natural units</p> <p>Conversion of outcomes to a measure of quality of life (e.g., QALYs or DALYs)</p> <hr/>
<p>For an intervention, what is the ratio of benefits to costs to society?</p> <p>Is the investment a justifiable use of scarce resources?</p> <p>What are the net benefits to society?</p> <p>What is the internal rate of return to society?</p>	<p>Benefit-cost analysis (BCA)</p>	<p>Comprehensive measure of the intervention's economic costs to society^a</p>	<p>Measures of the intervention's impacts at each point in time in natural units</p> <p>Market prices or "shadow prices" of the value to society of all outcomes^a</p>

COMMON QUESTIONS	TYPE OF ANALYSIS TO ANSWER QUESTION	REQUIREMENTS FOR COST ASSESSMENT	REQUIREMENTS FOR OUTCOME ASSESSMENT
<p>For an intervention, what is the ratio of benefits to costs for the stakeholder(s)?</p> <p>What are the net benefits to the stakeholder(s)?</p> <p>What is the internal rate of return to the stakeholder(s)?</p> <hr/> <p>What is the impact, of an intervention, year-by-year, on the government budget?</p> <p>What is the impact in the aggregate and for specific budget components?</p> <hr/> <p>How great would the impacts of an intervention have to be in order to break even (i.e., to pay back the intervention's cost)?</p>	<p>Return-on-Investment (ROI) analysis (also known as cost savings analysis)</p> <hr/> <p>Budgetary impact analysis (BIA) (a special case of cost savings analysis)</p> <hr/> <p>Break-even analysis</p>	<p>Comprehensive measure of the intervention's economic costs to the stakeholder(s)</p> <hr/> <p>Comprehensive measure of the intervention's economic costs to the government sector</p> <hr/> <p>Comprehensive measure of the intervention's economic costs to society or to the stakeholder(s)</p>	<p>Measures of the intervention's impacts at each point in time in natural units</p> <p>Market prices or “shadow prices” of the value to the stakeholder(s) of all outcomes</p> <hr/> <p>Measures of the intervention's impacts at each point in time in natural units</p> <p>Market prices or “shadow prices” of the value to the government sector of all outcomes</p> <hr/> <p>Market prices or “shadow prices” of the value to society or to the stakeholder(s) of all outcomes</p>

NOTES: All measures of intervention cost and impact are relative to a baseline condition.

^aAlthough the societal perspective is a desirable goal, other perspectives need to be considered as well, including the perspectives of program participants, other nonparticipants affected by the program, and/or, the government or public sector. BCA results can be particularly informative when the societal perspective is disaggregated to show these sub-perspectives. For more discussion on this topic, please visit www.nas.edu/econforkids to review Chapter 3 of the report.

KEY TERMS:

- **DALY (disability-adjusted life year):** A general measure of disease burden on quantity of life lived; 1 lost year of “healthy” life equates to 1 DALY.
- **Impact:** A change in outcome(s) that can be attributed to an intervention.
- **Intervention:** A term used to represent the broad scope of interventions, programs, practices, and policies that are relevant to children, youth, and families.
- **Outcome:** An attitude, action, skill, behavior, etc. that an intervention is intended to causally influence.
- **QALY (quality-adjusted life year):** A general measure of disease burden on the quality and quantity of life lived; 1 year in perfect health equates to 1 QALY.
- **Shadow price:** Estimated true value of a resource or impact or cost of the results of a particular decision; calculated when no market price is available or when market prices do not reflect the true value.
- **Societal perspective:** Captures the public sector and the private sector; this includes all stakeholders who have some relationship to an intervention as bearers of costs or as beneficiaries, as well as those who may be affected only indirectly.