## Summary of Economic Evaluation Methods

<table>
<thead>
<tr>
<th>Economic Evaluation Method</th>
<th>Comparison</th>
<th>Measurement of Effects</th>
<th>Economic Summary Measure</th>
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</thead>
<tbody>
<tr>
<td>Cost Analysis</td>
<td>Used to compare costs of implementing a program/intervention</td>
<td>Dollars</td>
<td>Cost of program</td>
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<tr>
<td>Cost of Illness Analysis</td>
<td>Used to measure the economic burden of a disease</td>
<td>Dollars</td>
<td>Cost of illness</td>
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<tr>
<td>Cost-Effectiveness Analysis</td>
<td>Used to compare interventions that produce a common health outcome</td>
<td>Health outcomes, measured in natural units</td>
<td>Incremental Cost-effectiveness ratio (ICER)</td>
</tr>
<tr>
<td></td>
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<td>Cost per case averted</td>
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<td>Cost per life-year saved</td>
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<tr>
<td>Cost-Benefit Analysis</td>
<td>Used to compare different programs with different units of outcomes (health and non-health)</td>
<td>Dollars</td>
<td>Net benefit or cost</td>
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<tr>
<td></td>
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<td>Benefit to cost ratio</td>
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<tr>
<td>Budget Impact Analysis</td>
<td>Used to estimate the financial consequences of adopting a new intervention for local, regional, and national budgets</td>
<td>Dollars</td>
<td>Annual change in resource use</td>
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<tr>
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<td>Annual change in cases of condition and associated resource use and costs</td>
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<tr>
<td>Return on Investment</td>
<td>A financial analysis from the perspective of the investor</td>
<td>Dollars</td>
<td>Net financial cost over dollars invested</td>
</tr>
</tbody>
</table>
Cost Analysis

State Tobacco Prevention Programs

- CDC, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. STATE (State Tobacco Activities Tracking & Evaluation System). Available at: http://www.cdc.gov/statesystem


Cost Analysis Example in Cancer Prevention


Cost of Illness


- Maciosek MV, Xu X, Butani AL, Pechacek TF. Smoking-attributable medical expenditures by age, sex, and smoking status estimated using a relative risk approach. Preventive medicine. 2015; 77:162-167.


Cost-Effectiveness Analysis


- Villanti A. Smoking Cessation Interventions for US Adults and Young Adults: Evaluating Effects and Cost-effectiveness: Johns Hopkins University; 2010.


Budget Impact Analysis


Cost-Benefit Analysis


**General Public Health Economic Evaluation Resources**

- Understanding and Using Economic Evidence, the Guide to Community Preventive Services (Chapter 11). Available at: https://www.thecommunityguide.org/sites/default/files/publications/Ch11-Economics.pdf