

Cost Analysis Plan Checklist

This checklist is designed to help users plan high quality economic evaluations of educational programs and interventions. The “Checklist Overview” provides a summary of the main checklist items and the “Detailed Checklist” provides detailed tips and descriptions. **Items in turquoise with the ||| symbol are advanced topics.** For guidance on conducting economic evaluations, see *Hollands, F.M., Pratt-Williams, J., & Shand, R. (2021). Cost Analysis Standards and Guidelines 1.1; Standards for Economic Evaluation of Educational and Social Programs*; *Levin et al. (2018).*

Checklist Overview

- Describe the design of your cost study** (context, audience, decision to be informed, research questions, description of intervention, type of economic evaluation, cost perspective, cost method, and which costs will be included)
- Describe how you will collect cost data** (data collection plan and instruments, national vs. local prices, price sources, sampling)
- Describe how you will analyze cost data** (cost tools, cost categories, sensitivity analysis, and price adjustments)
- Describe what cost metrics you expect to report**

Hollands, F., Pratt-Williams, J., & Shand, R. (2020). *Cost analysis plan checklist*. CAP Project. Retrieved from: <https://capproject.org/resources>

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Detailed Cost Analysis Plan Checklist

I. Describe the design of your cost study

- *Context.* Describe the context in which your cost study will be conducted including:
 - Audience for the analysis, decisions to be informed and research questions to be addressed.
 - A description of the intervention, target population and intended outcomes.
 - Geographical locations.
 - Number of sites and level(s) being studied (district/school/classroom/student).
 - Time period over which the intervention being studied will be implemented.
 - Frequency and dosage of treatment.
- *Type of economic evaluation.* Specify the type of analysis, e.g., cost estimation, cost analysis, cost-feasibility analysis (CFA), cost-effectiveness analysis (CEA), cost-benefit analysis (CBA), cost-utility analysis (CUA).
- *Cost perspective.* Indicate from whose perspective(s) you will estimate costs (e.g., societal, school, district). The societal perspective is recommended where possible and includes the costs to all stakeholders, e.g., school, district, state education agency, federal agency, families.
- *Cost method.* Name the cost method you will use (e.g., ingredients method, resource cost model), provide citations, and note any resources you will rely on for guidance if needed (e.g., relevant courses/training, tools, guides, technical assistance providers).
- *Which costs will be included.* Indicate whether you are estimating total costs of implementing the intervention, incremental costs compared with an existing or control condition, or both.
 - Specify whether you are:
 - ❖ identifying start-up costs as well as maintenance costs (if so, indicate which activities fall into each category, e.g., hiring, initial training, ongoing training).
 - ❖ including development costs that would not be required to replicate the implementation, and costs of research that do not contribute to the intended participant outcomes. If you are reporting these items, present them separately from the costs that would be incurred in a typical implementation at a new site.
 - Acknowledge any prerequisite or follow-up activities that will be needed to produce intended outcomes and may therefore need to be included in the analysis, e.g., to realize the educational benefits of a counseling intervention, participants may need to engage in one or more recommended resources/services during the study period.
 - If you are comparing costs of one or more treatment conditions to business as usual, or a control condition, briefly describe how you anticipate these alternatives may differ in resource use from the treatment intervention and how you might estimate relevant costs.

II. Describe how you will collect cost data



- *Data collection plan.* Describe how, when, and for what time period you will collect cost data.
 - Describe how you will document:
 - ❖ The type and quantity of resources needed to implement the intervention(s) being studied (treatment and, where relevant, control).
 - ❖ The percentage of available time each resource is used for your intervention.

- Include a description of the data collection instruments and the extent to which you can integrate cost data collection with fidelity of implementation or other data collection.
 - Provide, as relevant, a few examples of personnel, facilities, materials & equipment and other resources you expect will be needed to implement your intervention.
 - Document opportunity costs of resource use regardless of whether the resource is being provided free to users.
 -  If the control condition is likely to involve a variety of interventions, address how you will represent their costs.
 - *National vs. local prices.* Indicate whether you will use national prices or local prices, or both in separate analyses.
 - *Price sources.* Describe your expected sources of prices for personnel, facilities, materials & equipment, and other resources.
 -  *Sampling.* If you have multiple sites, cohorts, and/or years of implementation, indicate whether you will collect costs for all of these or a sub-set that you can justify.
- III. Describe how you will analyze cost data**
- *Cost tools.* Indicate any tools you will use to calculate costs (sum of ingredient quantities x percentage of use x adjusted prices).
 - *Cost categories.* Describe how you will categorize costs, for example:
 - By who pays.
 - By funding source.
 - By start-up vs. ongoing/maintenance.
 - For multi-year programs, by year.
 - Where relevant, by core components.
 - *Sensitivity analysis.* Describe one or more sensitivity analyses you will conduct to assess the extent to which your results change.
 -  *Price adjustments.* Explain any anticipated adjustments to prices, e.g., amortization of facilities and durable materials/equipment, discounting, inflation and/or geographical adjustments.
- IV. Describe what cost metrics you expect to report, for example:**
- Total costs of implementation in the study context (costs compared to business as usual).
 - Incremental costs compared to an alternative intervention.
 - Costs per school, per site, per classroom, and/or per student (or other participant).
 - Costs per year for multi-year programs.

In addition, for cost-feasibility analysis:

- A comparison of the estimated costs with available resources and funding.

In addition, for cost-effectiveness analysis:

- Indicate the cost and effectiveness metrics you will use to produce a cost-effectiveness (CE) ratio.
- If you are estimating impact of components, indicate whether you can also present costs of the components.
-  If you have only one treatment and control condition, and will therefore only produce a single CE ratio, suggest other interventions against which it could be useful to compare your intervention for relative cost-effectiveness.
-  If multiple comparable interventions are used in the control sites, one can serve as baseline and the others can serve as comparisons to the treatment to report comparative CE ratios.

In addition, for cost-benefit analysis:

- Benefit-cost ratio, net present value, internal rate of return.

In addition, for cost-utility analysis:

- Evaluation criteria used to evaluate each alternative intervention considered
- Importance weights assigned by stakeholders to each evaluation criterion
- Utility values for each intervention, cost-utility ratios and rankings.

Stages for Estimating Costs of Educational Programs

