



Module 2: Video 2 Outline

SLIDE 1: DESIGNING A COST ANALYSIS

Part 1: Descriptive Components

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SLIDE 2: MAIN ELEMENTS IN DESIGNING A COST ANALYSIS

Checklist for Elements to be Included in an Economic Evaluation Plan and Report

- Study motivation and context
 - The decision or research questions to be informed by the economic evaluation (if part of a larger study, how the evaluation fits with any broader research questions addressed by the study)
 - The type of economic evaluation (cost estimation, cost analysis, CFA, CEA, CBA, CUA)
 - Whether the economic evaluation is prospective, concurrent, or retrospective
 - Whether costs estimated represent total costs vs. business-as-usual, incremental costs, or expenditures only
 - The audience for the results
 - The perspective(s) taken (e.g., societal, public, private, education agency, participant)
 - Prevailing conditions and policies (e.g., locale, population demographics and academic achievement; funding policies and financial status; governance structures; curriculum and other

standards; regulatory constraints; length of school year (contracted days) and length of day (hrs); fiscal year beginning/end)

SLIDE 3: MAIN ELEMENTS IN DESIGNING A COST ANALYSIS

Checklist for Elements to be Included in an Economic Evaluation Plan and Report

- Study motivation and context
- Descriptive information about each program being analyzed
 - Name of program, implementing agency, and organizational level of delivery (e.g., district, school, classroom, student)
 - Logic model/theory of change, including components for the program being evaluated to illustrate how inputs/resources and activities, including duration, frequency, and time period during which the program is implemented, are expected to lead to intended outcomes for specified recipients
 - Whether the program is in a start-up or ongoing/steady-state phase and, if both phases are spanned, which activities are considered start-up versus ongoing
 - Scale of implementation
 - Types and numbers of participants served (e.g., 300 students or 75 teachers); distribution across sites
 - Type and number of study sites (e.g., 25 classrooms, 6 schools, 3 states)
 - Locations of study sites and whether urban/suburban/rural
 - Whether the intervention is stand-alone, supplementing, replacing, or partially substituting an existing program
 - Business-as-usual or other condition experienced by the control group participants, including the typical practice(s) being replaced or supplemented by the program received by the treatment group participants
 - Characteristics of the population served (e.g., K-2 ELLs; middle school Special Education teachers)
 - Resource categories, incl. key types of staff involved in planning, training, administering, implementing, and supervising the program

SLIDE 4: MAIN ELEMENTS IN DESIGNING A COST ANALYSIS

Checklist for Elements to be Included in an Economic Evaluation Plan and Report

- o Study motivation and context
- o Descriptive information about each program being analyzed
- o Study design considerations (Part II - Module 2: Video 3)
 - The time period and specific implementation year(s) for which cost analysis, CEA, and CBA data are collected and reported (time horizon)
 - For multiyear programs, the reference year to which costs and benefits are discounted to present value to account for the time value of money; present value formula used
 - Discount rate used to obtain present values of costs and benefits
 - The scope of cost data collection (i.e., whether the analysis includes costs of any pre-existing program, such as regular school instruction, or focuses on the resources required for the introduction of a new treatment)
 - Any sampling strategy used for collecting data from a subset of sites or participants
 - The methods used to collect cost data and estimate costs and benefits
 - A timeline for data collection (see CAP Project [Timeline for Cost Analysis](#))
 - Sources of data on resources and prices used to calculate costs
 - Instruments used to collect cost data (e.g., interview protocols, surveys)
 - Interest rate used to amortize the costs of durable assets (e.g., facilities, digital devices) and assumed lifetimes of these assets; amortization formula used
 - For CEA/CBA: methods used to identify rigorous (causal) outcome impacts to measure effectiveness

- For CBA: sources of price data on the willingness to pay for outcomes used to calculate benefits
- Whether national or local prices are used and for which country and geographic region
- Currency and year in which costs and benefits are expressed in constant currency; exchange rate
- Any applications of specified inflation and/or geographical indices to adjust prices
- The summary metrics and cost breakdowns to be presented
- How cost metrics are aligned/combined with outcome metrics, including whether costs are estimated for the treatment-on-the-treated or intent-to-treat sample
- Sensitivity analyses to be conducted/presented

SLIDE 5: STUDY MOTIVATION AND CONTEXT (1)

- Decision or research questions to be informed
- Type of economic evaluation
- Prospective, concurrent, or retrospective
- Total costs, incremental costs, or expenditures only
- Audience
- Perspective (e.g., societal, education agency, participant)
- Prevailing conditions and policies

SLIDE 6: STUDY MOTIVATION AND CONTEXT (2)

- Decision or research questions to be informed
 - Medium-sized, southern, urban school district wants to know which of 2 reading programs are helping students improve reading achievement the most and at what cost?
- Type of economic evaluation
 - Cost-effectiveness analysis
- Prospective, concurrent, or retrospective
 - Retrospective
- Total costs, incremental costs, or expenditures only
 - Incremental

SLIDE 7: STUDY MOTIVATION AND CONTEXT (3)

- Audience
 - Chief Academic Officer; Curriculum & Instruction Department at a medium-sized, southern, urban school district.
- Perspective (e.g., societal, education agency, participant)
 - Education agency; societal
- Prevailing conditions and policies
 - Tier 3 reading intervention mandated for struggling readers

SLIDE 8: DESCRIPTIVE INFORMATION ABOUT EACH PROGRAM BEING ANALYZED (1)

- Name of program, implementing agency, and organizational level of delivery
- Logic model/theory of change, including program components
- Implementation phase: start-up or ongoing/steady state
- Scale of implementation
- Stand-alone, supplementing, replacing, or partially substituting an existing program
- Business-as-usual or other conditions experienced by comparison group
- Characteristics of population served
- Types of resources needed to implement program

SLIDE 9: DESCRIPTIVE INFORMATION ABOUT EACH PROGRAM BEING ANALYZED (2)

- Name of program, implementing agency, and organizational level of delivery
 - Reading Recovery (RR): implemented district- wide, delivered 1-1 to students
 - Fast ForWord Reading (FFW): implemented by certain schools, delivered to groups of students
- Logic model/theory of change, including program components

- See program documentation for details:
 - RR: Pull-out 1-1 instruction by trained teacher
 - FFW: Pull-out online instruction

SLIDE 10: DESCRIPTIVE INFORMATION ABOUT EACH PROGRAM BEING ANALYZED (3)

- Implementation phase: start-up or ongoing/steady state
 - Both are ongoing programs but involve some start-up training costs for new personnel
- Scale of implementation
 - RR: 195 students served 1-1 across 15 elementary schools in one district
 - FFW: 195 matched students served in groups of 8-13 across 15 different elementary schools in the same district

SLIDE 11: DESCRIPTIVE INFORMATION ABOUT EACH PROGRAM BEING ANALYZED (4)

- Stand-alone, supplementing, replacing, or partially substituting an existing program
 - Supplementing regular reading instruction may replace other instructional activities
- Business-as-usual or other conditions experienced by comparison group
 - Fast ForWord Reading
- Characteristics of population served
 - First grade students scoring below 20th percentile
- Types of resources needed to implement program
 - RR: RR teachers and teacher leaders, RR curriculum materials
 - FFW: FFW licenses, computers and internet, instructional assistant