Resources to Encourage Costing and Cost-Effectiveness Analysis

Meghan Mahoney
Policy Manager, J-PAL
Department of Economics, MIT
**WHAT CONDUCT COST ANALYSIS?**

- In environment of limited resources, need information about what programs provide most effect per dollar spent
- Provides useful information for scaling or replicating
  - Important to know what effective programs cost
  - Detailed cost data enables sensitivity analysis
Why is Costing Difficult?

• Program budgets likely insufficient to estimate costs
• Complete costing requires collecting information from multiple sources
  – Academic papers or program reports for description of program structure, ingredients, and local conditions like household income
  – Interview researchers and implementers for additional program components and costs
  – Supplement with public sources (e.g. local wages, transportation costs, etc.)
Landscaping study in 2012 identified key barriers:

- Lack of data (cost and impact)
- Limited staff capacity to collect data and conduct analysis (time constraints and know-how)
- Lack of decision points to inform
CIFF-J-PAL CEA ToolKit Contents

• I. Cost-Effectiveness Analysis of Early Learning Investments at CIFF
• II. Approach to Cost-Effectiveness Analysis Throughout the Investment Life Cycle
• III. Lessons Learned and Remaining Challenges
• Appendices
  – 1: Costing Guidelines
  – 2: Assessing the Quality and Relevance of Impact Estimates
  – 3: Sensitivity Analysis
  – 4: Guidance for Interpreting Cost-Effectiveness in Investment Memos
I. Cost-Effectiveness Analysis

\[ CE \text{ Ratio} = \frac{\text{Impact of Program on Specific Outcome}}{\text{Total Cost of Implementing Program}} \]

- Summarizes a complex program in terms of a simple ratio of costs to impacts
- Allows for comparison between different programs evaluated in different contexts across different timeframes
- Sensitivity analysis to understand how the cost-effectiveness of a program might vary with context
II. APPROACH TO CEA THROUGHOUT PROGRAM LIFE CYCLE

• Retrospective analysis of programs
  – Exactly how cost-effective was my program?

• Prospective analysis of programs
  – Roughly how cost-effective could this proposed program be, at pilot or at scale?
  – How big an impact must this achieve to meet our threshold?
II. Approach to CEA Throughout Program Life Cycle

1. Initial CEA estimates are developed as a core part of the due diligence process undertaken by deal teams.

2. Cost data is continually updated and analyzed to identify opportunities for cost reductions that could be exploited to improve program affordability.

3. Program cost and impact data are used to update CEA estimates.

4. Updated information on costing, CEA, and financial sustainability is used alongside evaluation results in discussions with partners around scale-up and policy development.

Review landscape of existing CEA within each of Ciff's strategic priority areas are used to identify areas of potential new investments.
ADDITIONAL RESOURCES FOR COSTING AND CEA

1. Costing Guidelines
2. Assessing the Quality and Relevance of Impact Estimates
3. Conducting Sensitivity Analysis
4. Guidance for Interpreting Cost-Effectiveness in Investment Memos
ADDITIONAL RESOURCES FOR COSTING AND CEA

Comparative Cost-Effectiveness Analysis to Inform Policy in Developing Countries: A General Framework with Applications for Education

Iqbal Dhaliwal, Esther Duflo, Rachel Glennerster, Caitlin Tulloch
Abdul Latif Jameel Poverty Action Lab (J-PAL), MIT

http://www.povertyactionlab.org/publication/cost-effectiveness

Contact:
mahoneym@mit.edu

www.povertyactionlab.org/policy-lessons