

This report has presented an overview of the issues that policy-makers would need to assess to be able to select the most appropriate types of cost and outcome analysis for an early childhood intervention program—or to determine whether to even undertake cost and outcome analysis at all. We reviewed the policy scorecard analysis framework used by RAND analysts over the years to organize cost and outcome analysis on a variety of topics. This framework—and the scorecard at its core—helps distinguish between the alternative types of cost and outcome analysis and highlights the data requirements and methodological considerations for the various analysis options.

We also discussed specific methodological issues associated with cost and outcome analysis of early childhood intervention programs and reviewed the results from cost-benefit analysis of three specific programs. Finally, we illustrated the application of cost and outcome analysis methods to the case of the SESS program. Not only does this application address decisions facing that program’s stakeholders, it also serves as an illustration of the issues that would need to be considered in assessing the feasibility of undertaking cost and outcome analysis for other early childhood programs.

The recommendations specific to the SESS program evaluation presented in Chapter Five may be restated in more general terms to provide a set of guiding principles regarding cost and outcome analysis of similar types of early childhood intervention programs. These recommendations pertain to evaluation design and the mea-

surement of program costs and benefits. More specifically, we recommend the following:

- Regarding the design of a program evaluation and cost and outcome analysis:
 - Specify the explicit goals of the cost and outcome analysis to guide the scope of cost and benefit data collection and analysis.
 - Identify comparison groups and track the same cost and outcome measures for both comparison and participant groups. If possible, use random assignment to define comparison groups to provide a more valid test of intervention program effects.
 - To minimize attrition in a longitudinal study, devote resources to retaining study subjects.
 - Collect information on program features through site visits and other mechanisms to accurately characterize features of the intervention models as they are implemented and to ensure fidelity to the program model.
- Regarding the collection and analysis of cost data:
 - Collect cost information for both treatment and control groups at each site where the intervention program is implemented.
 - The cost information should be as comprehensive as possible: Costs borne by various parties should be differentiated, the period during which costs are incurred should be identified, and direct and indirect costs, fixed and variable costs, and goods and services provided in-kind should be measured.
 - Plan for proper training and technical support of implementation sites and any cross-site data collection organizations to ensure uniformity in the collection of cost data. Collect information on the cost of data collection, training and support, and the related analyses of the data.

- Regarding the collection and analysis of outcome data:
 - If cost-benefit or cost-savings analysis is the goal, then outcome data should include information for parents and other caregivers in the short term and the long term and for children in the long term in those domains with outcomes that can be readily evaluated in terms of dollars and that can produce large dollar benefits. The choice of specific outcome measures should be guided by findings from related evaluation studies whenever possible.
 - Obtain information from participants that facilitates collection of administrative data and allows effective tracking of individuals to increase response rates at later follow-ups.
 - When possible, collect complete histories using retrospective survey questions or administrative data for outcomes that may generate a continuous flow of dollar benefits (e.g., labor market outcomes, social welfare program use, use of costly health or education services).
 - When supported by other empirical evidence, project future benefits based on observed outcomes. Consider additional method development that would permit such forecasts for a broader range of outcomes.

Although we believe these principles are quite general, ultimately these recommendations should be viewed as guidelines that may need to be tailored to the specific circumstances of a given intervention program and its evaluation design. In the end, the objectives of a program's decisionmakers will dictate the shape of the analysis. As we have seen, cost and outcome analysis is not one method but rather a set of methods, which serve different purposes, place different demands on data collection, and themselves require differing amounts of resources.

The general policy scorecard analysis tools considered in this report, and those specific to cost and outcome analysis, have great promise for improving decisionmaking with respect to investment programs, such as the early childhood interventions represented by SESS and its counterparts. The cost-benefit analyses of the three programs reviewed in Chapter Four have been very influential in providing a

justification for devoting resources to interventions with at-risk populations during early childhood. Although results demonstrated for the specific programs, such as the Perry Preschool program, Elmira PEIP, and Chicago CPC, will not necessarily be replicated in other sites implementing the same design or for other program designs, the evidence that program benefits can far outweigh program costs provides proof of the principle that well-targeted investments now can be paid back by future cost savings and benefits to society. When used with skill and judgment, these methods applied to such other programs as SESS will further broaden our base of knowledge with regard to the value of these investments and assist decisionmakers in their choice among program alternatives.