The Cost of Implementing a Home Visiting Program Designed to Prevent Repeat Pregnancies Among Adolescent Mothers

Cost is often a primary concern when policymakers and practitioners consider a new program. This brief provides information on the cost of implementing a home visiting program for adolescent mothers. The information comes from an evaluation of the Steps to Success home visiting program in San Angelo, Texas, which Mathematica conducted for the Administration for Children and Families within the U.S. Department of Health and Human Services. As part of the evaluation, trained staff from Healthy Families San Angelo (HFSA) provided Steps to Success to pregnant or recently postpartum mothers ages 14 to 20. HFSA developed Steps to Success by enhancing a traditional home visiting program offered by the organization. While HFSA's traditional home visiting program focused on child development and parenting, the enhanced program included additional program components designed to (1) promote healthy birth spacing, (2) encourage father involvement, and (3) support mothers’ education and career aspirations. For both Steps to Success and HFSA's traditional home visiting program, mothers receive program services for up to two years.

Estimated cost

The estimated cost of Steps to Success includes the value of all resources HFSA required to deliver the program, ranging from personnel to local travel and supplies. As discussed later, these resources reflect what other similar organizations would likely need to replicate the program during a steady state of operations. The estimated cost does not include any training or other start-up costs. From September 2014 to August 2015, HFSA conducted a total of 2,705 home visits across all mothers in the Steps to Success program. We estimated the cost of delivering these services as $233 per visit. To estimate the overall cost of delivering Steps to Success to one participant, we multiplied the average cost per home visit ($233) by the average number of visits mothers received (33). This calculation yielded an estimated per-participant cost of $7,689.

Personnel costs for the home visitors and other program staff (including staff salaries, payroll taxes, and benefits) accounted for 85 percent of the total annual program cost. Other direct costs, primarily related to travel, accounted for 10 percent of total program cost. The remaining costs (5 percent) were for supplies, equipment, facilities, and contracted services.

Summary of key findings

• On average, each mother received a total of 33 home visits over two years.
• The study team estimated the average cost of Steps to Success at $233 per home visit and $7,689 per participant.
• Personnel costs for the home visitors and other program staff accounted for the largest share (85 percent) of the total cost.

The cost estimates do not account for the time mothers and fathers spent participating in the Steps to Success home visits. If we had included these broader societal costs (that is, the time parents could have spent on other productive activities, such as working or child care), the per-participant cost of Steps to Success would have increased from $7,689 to $8,316, an increase of about 8 percent.
Cost estimates in perspective

Steps to Success had a higher per-participant cost than HFSA’s traditional home visiting program ($7,689 versus $5,140). The difference in the cost estimates can be explained by differences in the frequency of home visits. To enable the Steps to Success home visitors to cover a wider array of topics, they met with mothers more frequently, particularly during the first three to six months of the program. Mothers in Steps to Success received more home visits, on average, than mothers in the traditional home visiting program (33 visits versus 20). Both programs had a similar average cost for a single home visit ($233 for Steps to Success versus $257 for the traditional home visiting program).

In addition, Mathematica’s impact study of Steps to Success found that, compared to HFSA’s traditional home visiting program, Steps to Success increased mothers’ use of long-acting reversible contraceptives and decreased the incidence of unprotected sex for younger mothers (Rotz et al. 2019). Compared to HFSA’s traditional home visiting program, Steps to Success did not change the likelihood of having a repeat pregnancy after two years. Mathematica’s impact study of Steps to Success used a random assignment design to measure the impacts of the program two years after mothers enrolled in the study, around the time program services were about to end.

The estimated cost per-participant for both Steps to Success and HFSA’s traditional home visiting program are in line with publicly available cost estimates for other home visiting programs. One study of several home visiting programs, including three intensive, multiyear home-based programs (Healthy Families America, Nurse-Family Partnership, Parents as Teachers), reported per-participant program costs that ranged from $2,526 to $8,213 (Burwick et al. 2014).

Data and methods

We estimated program costs using the resource cost method (Levin and McEwan 2001), which involves identifying all the resources required to deliver a program and assigning a dollar value to each resource. For HFSA, we collected data and estimated costs for a one-year period. Mathematica’s evaluation of Steps to Success started in 2013, so we chose to collect cost data during the subsequent year (September 2014 to August 2015) to measure the cost of operating in a steady state.

We relied on HFSA’s accounting records to value the resources, with three exceptions.

1. We adjusted local personnel resource prices to national equivalents using a wage index created from state- and national-level wages.
2. We calculated the annual value of equipment using the equipment’s estimated useful life.
3. We valued the time participants spent engaged in home visits using the minimum wage in Texas.

The PREP Multi-Component Evaluation

This brief and an accompanying report, “Enhancing a Home Visiting Program to Address Repeat Adolescent Pregnancy: The Longer-Term Impacts of Steps to Success” are part of a series of products from the PREP multi-component evaluation. Learn more about the evaluation at https://www.acf.hhs.gov/opre/research/project/personal-responsibility-education-program-prep-multi-component. Learn more about the PREP initiative at https://www.acf.hhs.gov/fysb/programs/adolescent-pregnancy-prevention.

References


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