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Planning for a Pay for Outcomes Approach in Home Visiting

A Review of Research to Inform Maternal, Infant, and Early Childhood Home Visiting Outcome Selection, Projected Savings, and Pricing

Introduction

OPRE Report 2020-90

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Overview

Pay for outcomes (PFO) is a payment model that promotes innovative financing for social initiatives, connecting funding to outcomes and, in some cases, savings. The Bipartisan Budget Act of 2018 (Public Law 115–123, Section 50605) allows Maternal, Infant, and Early Childhood Home Visiting (MIECHV) Program awardees to implement PFO initiatives. PFO can help awardees expand services, improve outcomes, reach new or underserved populations, and/or engage new stakeholders.

This resource summarizes home visiting research findings to inform PFO feasibility studies and PFO project development, including outcome selection, projected cost savings, and outcome payment pricing for PFO financial agreements. It details statistically significant home visiting outcomes, the potential economic value of home visiting’s impact, and the availability of administrative data sources to calculate return on investment. Results are available by outcome domain and by home visiting model.

Each module includes a summary of results along with individual profiles for each study. Profiles show methods, target population, location, and model impact or outcome valuation and cost data sources. This four-module series includes—

- *Module 1: Overview of Outcomes Demonstrated in Home Visiting Studies*, which presents an in-depth scan of home visiting outcomes achieved by model
- *Module 2: Economic Value of Home Visiting Outcomes*, which details monetary values researchers have used to establish savings in home visiting return on investment analyses
- *Module 3: Economic Value of Outcomes in Non-Home Visiting Research*, which summarizes monetary values researchers have used for similar outcomes in non-home visiting studies
- *Module 4: Administrative and Government Cost Data Sources*, which collates the administrative data sources used in the return on investment calculations

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Introduction

Pay for outcomes (PFO) is a payment model that promotes innovative financing for social initiatives, connecting funding to outcomes and cost savings. The Bipartisan Budget Act of 2018 (Public Law 115–123, Section 50605) allows Maternal, Infant, and Early Childhood Home Visiting (MIECHV) Program awardees to pursue PFO arrangements. PFO can help awardees expand services, improve outcomes, reach new or underserved populations, and/or engage new stakeholders. This resource provides information to inform PFO feasibility studies and PFO project development, including outcome selection, projected savings, and outcome payment pricing for financial agreements.

About MIECHV

The [MIECHV Program](#) builds on decades of scientific research showing that home visits by a nurse, social worker, early childhood educator, or other trained professional during pregnancy and in the first years of a child’s life can improve the well-being of children and families by preventing child abuse and neglect, supporting positive parenting, improving maternal and child health, and promoting child development and school readiness (Administration for Children and Families, 2019; National Home Visiting Resource Center, 2018). MIECHV supports voluntary, evidence-based home visiting services for at-risk pregnant women and parents with young children up to kindergarten entry (Health Resources and Services Administration [HRSA], 2019).

States, territories, and tribal entities receive funding through MIECHV and have the flexibility to select evidence-based home visiting service delivery models that best meet state and local needs. MIECHV is administered by the HRSA in partnership with the Administration for Children and Families.

Overview of MIECHV Pay for Outcomes

Along with improving the lives of children and families, evidence-based home visiting can lead to short- and long-term cost savings, cost avoidance, and social benefit, including reduced spending on government programs and increased individual earnings (Michalopoulos et al., 2017). In the short term, for example, improved birth outcomes and reductions in child abuse and neglect can result in cost savings to Medicaid and Child Welfare (Title IV-E, Title IV-B). Services also may benefit children and their caregivers over the course of their lives, reducing government spending on special education and public assistance programs, and producing lifelong gains associated with better birth outcomes and maternal health, reductions in child abuse and neglect, and increases in family economic self-sufficiency.

The Bipartisan Budget Act of 2018 allows MIECHV awardees to implement PFO, an innovative approach to funding home visiting service delivery. PFO is “a performance-based grant, contract, cooperative agreement, or other agreement awarded by a public entity in which a commitment is made to pay for improved outcomes achieved as a result of the intervention that result in social benefit and direct cost savings or cost avoidance to the public sector” (Bipartisan Budget Act of 2018). PFO offers a new opportunity for awardees to expand services, improve outcomes, reach new or underserved populations, and/or engage new stakeholders (Fudge et al., 2019). HRSA’S MIECHV Program Pay for Outcomes Supplemental Information Request (SIR) provides instructions on implementing PFO in alignment with statutory requirements.

Pay for outcomes is a performance-based grant, contract, cooperative agreement, or other agreement awarded by a public entity in which a commitment is made to pay for improved outcomes achieved as the result of the intervention that result in social benefit and direct cost savings or cost avoidance to the public sector (Bipartisan Budget Act of 2018).

Exhibit 1 shows the process for pursuing MIECHV PFO as outlined in the SIR, including the following:

- **Conduct a PFO feasibility study.** First, the awardee conducts a PFO feasibility study. This includes, among other tasks, selecting a target population; identifying key outcomes to achieve that will result in public cost savings, cost avoidance, and social benefit; choosing a home visiting model and service providers with capacity to attain the targeted outcomes; identifying a third-party evaluator; and engaging potential funders. The purpose of the feasibility study is to determine whether to move forward with a PFO project. Awardees have the option to use MIECHV formula funds to pay for a PFO feasibility study through their annual formula funding application.
- **Apply to HRSA.** If the feasibility study indicates a PFO project is viable and the awardee chooses to pursue PFO, the awardee may propose to use MIECHV funds in its annual formula funding applications and should submit a response to the SIR.
- **Secure additional funding.** Although not required, some awardees may choose to cultivate relationships with potential investors who agree to pay for home visiting services. Investors typically include foundations, philanthropists, private corporations, or financial institutions. The awardee repays the investor an agreed upon amount only if home visiting achieves desired outcomes.
- **Implement a MIECHV home visiting PFO project.** The awardee establishes agreements with service providers and funders to implement PFO, including outcome measures and time frames. Once agreements are in place, implementation can begin.
- **Conduct a third-party evaluation.** The awardee must engage an independent evaluator who uses rigorous evaluation methods to determine if the project achieves agreed upon outcomes.
- **Make PFO payments.** The awardee makes payments as outlined in the PFO agreements only if the evaluation verifies the program achieves desired outcomes. Payments typically go to investors and/or service providers, depending on the PFO agreement.

Exhibit 1. MIECHV Pay for Outcomes Process



Purpose of This Resource

Planning for a Pay for Outcomes Approach in Home Visiting presents research findings on home visiting outcomes and their associated costs. Learning how researchers measure and monetize outcomes provides examples for MIECHV awardees to replicate using their own local data when available. Awardees, evaluators, and PFO contractors can use this resource to inform PFO feasibility studies and PFO project development, including outcome selection, projected savings, and outcome payment pricing. While this resource provides supporting data for PFO, it is not an overarching PFO toolkit and it is not intended to serve as guidance. Instead, awardees can use the research presented to help conceptualize a PFO project. Awardees interested in more detailed information and instructions related to proposing and implementing a PFO initiative should consult the SIR.

This resource packages study findings and details to provide information on home visiting outcomes, per unit costs for these outcomes, and the availability of administrative data sources to determine costs. Cost data are essential for calculating savings and return on investment (ROI) for home visiting. Each module summarizes results or monetized value for the home visiting outcome measures before profiling each study’s impact, methods, target population, location, outcome valuation, and data sources used to inform the value. This four-module series includes—

- *Module 1: Overview of Outcomes Demonstrated in Home Visiting Studies*, which presents an in-depth scan of home visiting outcomes achieved by model
- *Module 2: Economic Value of Home Visiting Outcomes*, which details monetary values researchers have used to establish savings in home visiting return on investment analyses
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Exhibit 2 outlines where to look for various types of information.

Exhibit 2. Navigating the Resource

I’m interested in . . .	Where to look and what you will find
PFO information	Introduction explains PFO Introduction provides additional resources in the reference list
Information on specific home visiting models	Module 1 summarizes home visiting outcomes with model highlights Module 1 study profiles show outcome findings by model Module 2 identifies monetized home visiting outcomes by model Module 2 study profiles show cost data by model
Home visiting outcomes	Module 1 summarizes home visiting outcomes Module 2 identifies monetized home visiting outcomes Module 3 provides monetized outcomes in non-home visiting research Study profiles for Modules 1, 2, and 3 show findings in greater detail
MIECHV performance measures	Module 2 includes a crosswalk between MIECHV construct indicators and monetized outcomes
Monetized outcomes	Module 2 identifies monetized home visiting outcomes Module 3 provides monetized outcomes in non-home visiting research
Data sources to determine monetary value	Modules 2 and 3 study profiles show data sources Module 4 lists administrative and government data sources

Getting Started With PFO

PFO Feasibility Study

PFO projects typically begin with an assessment of the feasibility of using a PFO approach to deliver and fund services. This assessment is called a feasibility study. During the feasibility study, awardees actively engage a variety of stakeholders, including, but not limited to, potential funders, service providers, other government partners, evaluators, and families (Fudge et al., 2019). The awardee and stakeholders work together throughout the feasibility study to do the following:

- Specify funding for PFO from MIECHV, local providers, foundations, and/or investors, among others.
- Identify a target population and key outcomes to target.
- Select home visiting models to achieve the outcomes and a service provider(s) to implement the selected model(s).
- Strategically identify outcomes and measures that local data or previous research have shown produce federal, state, and/or local cost savings or cost avoidance and social benefit and are aligned with MIECHV benchmarks and constructs.
- Determine outcome targets, payment amounts for achieving results, and the payment schedule using local cost data when available or cost figures from previous research.
- Identify a third-party evaluator responsible for designing and overseeing an evaluation that meets MIECHV standards for a rigorous study as outlined in the SIR to determine if outcomes are achieved.
- Examine the awardee's and participating service providers' ability to collect data and/or access administrative data to track outcomes.
- Discuss the willingness of stakeholders, including funding partners, to participate; outline potential PFO agreements.

Feasibility, Outcomes, and ROI

A feasibility study may show that the home visiting model could decrease future need for public services such as public assistance, special education, criminal justice, and/or Medicaid-funded health care.

The resulting fiscal and societal savings form the basis of the **return on investment**.

The awardee uses the completed feasibility study to decide whether to pursue a PFO initiative using MIECHV funds for outcome payments.

Role of Prior Research in PFO

HRSA encourages awardees to use local data when possible to inform the feasibility study. Published research can provide insight for awardees in how to use their local data to identify potential outcomes and project future savings or fill the gap when local data are not available. Prior research can particularly inform the following components of PFO feasibility studies and project development: outcome measure selection, savings and societal benefit projections, and the financial model (if investors are involved).

Outcome Measure Selection

Successful PFO projects carefully pinpoint one or more meaningful outcomes service providers are likely to achieve. Results from rigorous local evaluation or research literature can show (1) specific outcomes the intervention has achieved in the past, (2) length of time to achieve the outcomes, and (3) effect size. Awardees can assess the study design, target population, study location, and other contextual details to help determine the likelihood they are to experience similar results. Potential PFO investors typically use these data to inform their investment decision.

Savings Projections

Awardees considering PFO may want an estimate of the potential monetary value of outcomes to inform their feasibility study. Awardees may calculate value based on anticipated cost savings, cost avoidance, and/or social benefit. This calculation is not a full-scale benefit-cost analysis; rather, it is an estimate of future savings. Published home visiting ROI studies can inform projected savings. These studies often describe their analysis, including the per unit cost of each outcome measure used in the calculation, data sources informing the per unit cost, and actual savings and/or ROI findings for the home visiting model. Awardees may use the ROI result to predict future savings and/or apply the per unit costs to the outcomes they have achieved in the past to estimate potential savings, as illustrated in the following example.

Example: Estimating Program Savings

A potential PFO project is considering *decrease in hospitalization* as a targeted outcome.

- The awardee consulted prior research and learned that others had used state Medicaid reimbursement rates to estimate potential public savings. The awardee determined its state Medicaid payment rate for one night in the hospital is \$1,610 per infant.
- The awardee's previous evaluation found that once discharged after birth, infants in home visiting were hospitalized an average of .1 nights in the first year of life, compared to .6 nights for the comparison group. Therefore, home visiting infants were hospitalized .5 fewer nights on average.
- The program is estimated to save $\$1,610 \text{ per night in hospital} \times .5 \text{ nights} = \805 per infant receiving Medicaid in the first year of life for this outcome.

PFO Financial Model

A PFO initiative commonly includes an agreement or contract between the awardee and other partners. These documents include details on the amount to be paid and the timing of the payment. Prior ROI studies can guide both. Awardees can use the outcome per unit cost cited in these studies or calculate their own figures with local administrative data. Prior research can also indicate the length of time to achieve an outcome, resulting savings in that period of time, and frequency at which the savings accrue, all of which are helpful in structuring PFO projects.

Feasibility studies assess whether programs are good candidates for PFO. Can a program achieve results and save money, especially future government spending?






































Prior research can help awardees answer these questions.

Accessing Prior Research





Planning for a Pay for Outcomes Approach in Home Visiting packages home visiting results and savings documented in prior research to inform PFO outcome measure selection, projected savings, and outcome payment pricing. Exhibit 3 describes the outcome domains covered and types of information available in each module.

Exhibit 3. Prior Home Visiting Research Covered in This Resource

Types of information provided in each module

Home visiting outcomes	Module 1	Module 2	Module 3	Module 4
<i>Child development and school readiness</i>	 	\$  	\$ 	
<i>Child health</i>	 	\$  	\$ 	
<i>Family economic self-sufficiency</i>	 	\$  		
<i>Linkages and referrals</i>	 			
<i>Maternal health</i>	 	\$  	\$ 	
<i>Positive parenting practices</i>	 			
<i>Reductions in child maltreatment</i>	 	\$  		
<i>Reductions in juvenile delinquency, family violence, and crime</i>	 	\$  		

Key: Icon indicates type of information available in each module:

-  Results by home visiting model
-  Home visiting outcomes
-  Cost figures for monetized outcomes
-  Administrative data sources

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