MATHEMATICA
Policy Research

OPRE

Home Visiting Evidence of Effectiveness (HomVEE)
Model Prioritization Procedures

Webinar

November 26, 2018

Amanda Coleman • Emily Sama-Miller • Lauren Akers

Purpose of the Webinar

Answer commonly asked questions about HomVEE

1. **How does HomVEE decide which models to review each year?**

2. **When will my model or study be reviewed if it is not reviewed this year?**

3. **Where can I learn more about the process?**

MATHEMATICA
Policy Research

What Is HomVEE?

- **The HomVEE review is a systematic review of home visiting research literature.**

- **HomVEE assesses which home visiting models have sufficient evidence to meet HHS's criteria for an "evidence-based early childhood home visiting service delivery model."**

- **Results are typically published annually by September 30.**

HHS = U.S. Department of Health and Human Services

MATHEMATICA
Policy Research

Steps in the Review Process

- **Step 1: Search and screen the literature**
- **Step 2: Prioritize models for review**
- **Step 3: Rate the quality of the impact studies for models being reviewed**
- **Step 4: Assess the models' evidence of effectiveness**
- **Step 5: Review implementation information**
- **Step 6: Summarize and publish results**

To date:

- **46 models reviewed**
- **20 meet evidence-based criteria (18 are eligible for the Maternal, Infant, and Early Childhood Home Visiting [MIECHV] program)**

MATHEMATICA
Policy Research

HomVEE Prioritization Criteria

MATHEMATICA
Policy Research

Prioritization Summary

- **HomVEE reviews only literature on prioritized models.**

- **Prioritized models might include:**
  - **Models that have never been reviewed**
  - **Updates to previously reviewed models (that are, and are not, evidence based)**

- **Number of models reviewed depends on available resources.**

- **Prioritization involves:**
  - **Calculating and applying study-level points**
  - **Calculating and applying model-level points**
  - **Weighting the scores and sorting the resulting list to identify priorities**

MATHEMATICA
Policy Research

Prioritization Begins:
Calculating Study-Level Points

MATHEMATICA
Policy Research

Study-Level Points

Component	Points	Notes
Number and design of impact studies	2 or 3 per study	3 points for each randomized controlled trial, single-case design, or regression discontinuity design; 2 points for each matched-comparison group design
Large sample size	1 per study	Study sample contains 250 or more pregnant women, families, or both
Outcomes of interest	1 per study	Study examines outcomes in one or more of the following domains: reductions in child maltreatment; reductions in juvenile delinquency, family violence, or crime; linkages and referrals; and family economic self-sufficiency
Location	0.5 per study	The study sample lives in the United States or is an indigenous population in or outside of the United States
Study sample characteristics	0.25 per study	The entire sample belongs to one or more priority populations named in the MIECHV statute

Note: Points are based on information from study titles and abstracts.

MATHEMATICA
Policy Research

MIECHV Priority Populations

According to (42 U.S.C. § 711 (d)(4)), priority populations are as follows:

- Low-income families

- Families who are pregnant women who have not attained age 21

- Families that have a history of child abuse or neglect or have had interactions with child welfare services

- Families that have a history of substance abuse or need substance abuse treatment

- Families that have users of tobacco products in the home

- Families that are or have children with low student achievement

- Families with children with developmental delays or disabilities

- Families that, or that include individuals who, are serving or formerly served in the Armed Forces, including such families that have members of the Armed Forces who have had multiple deployments outside of the United States

Study-Level Points: Example (1)

- **Study 1 involved a group of 100 pregnant women living in Florida. All were smokers when they enrolled in the program. The home visiting intervention sought to reduce smoking among pregnant women, and it used a matched-comparison group design. How many prioritization points does this study earn?**

  - **2.75 points:**
    - 2 points for a matched-comparison group design
    - 0.5 points because the participants lived in the United States
    - 0.25 points because all participants belonged to a MIECHV priority population (families with users of tobacco products in the home)

Study-Level Points: Example (2)

- **Study 2 is a randomized controlled trial of 500 pregnant adolescents. The home visiting intervention sought to help them become economically self-sufficient. The study measured employment outcomes and use of self-sufficiency programs in the community. How many prioritization points does this study earn?**

  - **5.25 points:**
    - 3 points for its design (randomized controlled trial)
    - 1 point for a sample larger than 250
    - 1 point for outcomes of interest (family economic self-sufficiency)
    - 0.25 points for a MIECHV priority population (pregnant women under age 21)

MATHEMATICA
Policy Research

Prioritization Continues:
Model-Level Points

MATHEMATICA
Policy Research

Model-Level Points

- **First, sum all study-level points for studies on a model**

- **Then, add up to 4 model-level points, 1 for each of the following:**
  - The model is linked to a national organization or institution of higher education (either inside or outside of the United States)
  - The model is currently serving or available to serve families
  - The model has been implemented for at least three years (even if it's not currently active)
  - Support is available for implementing the model in the United States

- **Based on information:**
  - In study titles and abstracts
  - From model websites
  - Already known to HomVEE from previous reviews

MATHEMATICA
Policy Research

Model-Level Points: Example (1)

- **Model A was developed and implemented by an early childhood center at a university in South Dakota. It was used between 2004 and 2010 but is not currently active. The model developer's contact information is available online if communities are interested in using the model in their area. How many prioritization points does this model earn?**

  - **3 points:**
    - 1 point for being associated with a national organization
    - 1 point for being implemented for at least three years
    - 1 point for the availability of implementation support in the United States

MATHEMATICA
Policy Research

Model-Level Points: Example (2)

- **Model B was designed and first implemented by a group in Hawaii in 2016, and it is currently serving families. Additional information cannot be found online. How many prioritization points does this model earn?**

  - **1 point:**

    - 1 point for being currently active

MATHEMATICA
Policy Research

Prioritization Concludes: Weighting and Sorting

MATHEMATICA
Policy Research

Weight the Score (Evidence-Based Models)

- **Weighting the score ensures that evidence-based models with new research get periodic updates**

- **Prioritization score = model point total * weight**
  - **A model that is already evidence based gets a weight based on the number of years since it was last reviewed and a report was released:**

  $$Weight = [1 + 0.1 * (current\ year - prior\ report\ release\ date)]^2$$

  Example:

A model being considered in 2019 that had a report released in 2015 would get a weight of

$$[1 + 0.1 * (2019 - 2015)]^2 = 1.96$$

Sort Models by Weighted Score

- **HomVEE sorts models from highest to lowest.**
  - The top-scoring models get reviewed that year; the number of models reviewed each year depends on available resources.

- **Beginning in 2019, HomVEE will have two tracks for review:**
  - One for models that are not evidence based at the time of prioritization, and one for evidence-based models
  - HomVEE will review highest-scoring models in each track, subject to resource availability
  - Earlier, HomVEE sorted all models together (and gave even more weight to models that were not evidence based)

MATHEMATICA
Policy Research

Exceptions to Prioritizing High-Scoring Models

- **If resources are limited, HomVEE will not review research conducted outside of the United States on a model that is already evidence based.**

  - **If these reviews are not done, the model report on the HomVEE website will clearly indicate which research was and was not included in the updated report.**

- **HomVEE will not update model reviews more often than every two years.**

- **The MIECHV program may coordinate with HomVEE to prioritize review of promising approaches implemented and evaluated under a MIECHV grant.**

MATHEMATICA
Policy Research

Conclusion

MATHEMATICA
Policy Research

Annual Review Steps

- **Winter: Conduct prioritization; models with the highest points are selected for review**
  - **Might mean contacting model developers for clarification**
  - **Models that are not reviewed in a given year will be considered in the prioritization process in subsequent years**

- **Spring: Review studies on prioritized models**
  - **Might mean contacting study authors for clarification**
  - **Studies submitted through the call for studies might not be reviewed if the model does not have enough points to be prioritized**

- **Summer: Prepare or update reports on models that are not evidence based (at the time they are prioritized)**
  - **Results released on HomVEE website by September 30**
  - **Results for models that were already evidence based are released later**

MATHEMATICA
Policy Research

Where to Find More

- **HomVEE website**
  - **https://homvee.acf.hhs.gov/**
  - **On home page:**
    - See updates in What's New sidebar
    - Click button at bottom right to join mailing list

What's New!

HomVEE releases call for studies.

HomVEE announces two tracks for evidence review.

Read the report for one new model-Following Baby Back Home.

Read the updated reports for three models.

Eight implementation profiles updated.

Read an updated brief summarizing the results of the HomVEE review.

Read the HomVEE executive summary for a comprehensive overview of review procedures, standards, and results.

Read the author reporting guide, updated to match new prioritization procedures.

Join the HomVEE email list

MATHEMATICA
Policy Research

Thank You!

MATHEMATICA
Policy Research

Your Questions?

MATHEMATICA
Policy Research

Contact Us

- **HomVEE mailbox: <u>homvee@acf.hhs.gov</u>**

MATHEMATICA
Policy Research