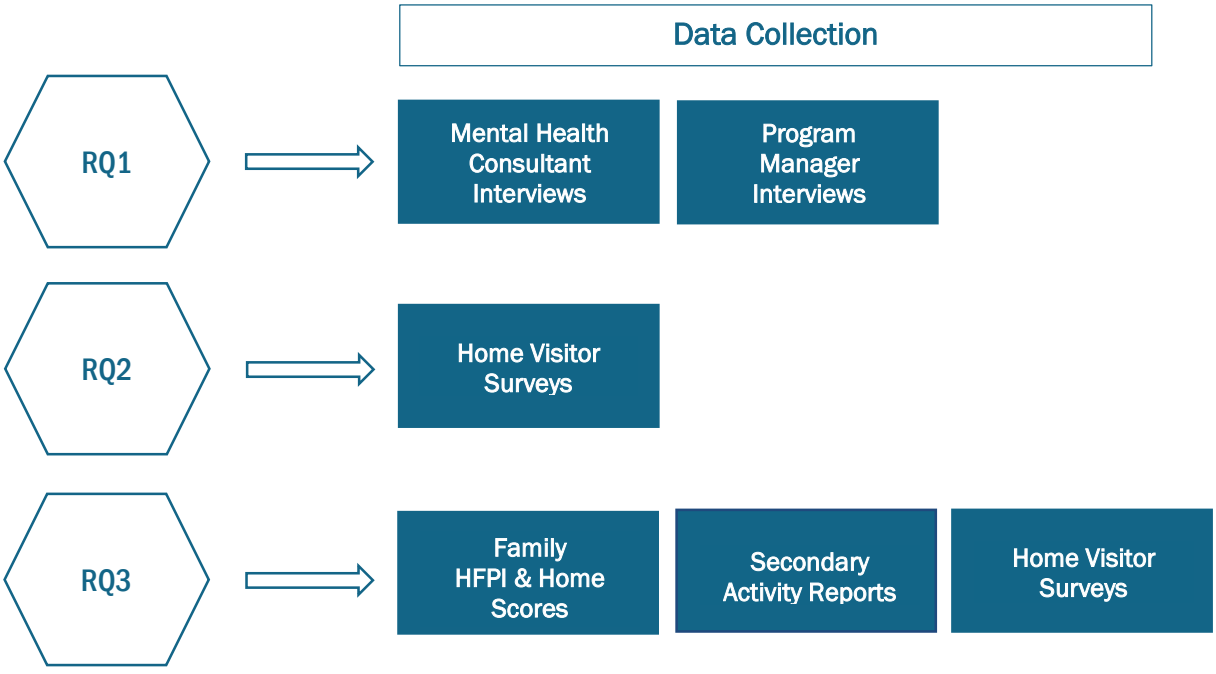
MIECHV FY2018 Evaluation
Executive Summary

Study Overview

The Maternal, Infant, and Early Childhood Home Visiting (MIECHV) program supports at-risk families by providing resources to ensure that children are physically, socially, and emotionally healthy and ready to learn. The purpose of Indiana MIECHV is to support the delivery of coordinated and comprehensive high-quality voluntary early childhood home visiting services to eligible families. The overall vision of Indiana MIECHV is to improve health and developmental outcomes for children and families who are at risk. Mental Health Consultation (MHC) is an enhancement to the Healthy Families Indiana (HFI) program providing licensed mental health clinicians tasked with supporting home visitors' and families' mental health by monitoring family records, supporting home visitors with strategies, identifying overall trends, and providing relevant training. The FY2018 evaluation was designed to 1) identify the supporting factors and barriers associated with implementing MHC with fidelity at the site level, 2) examine the effects of MHC fidelity on staff outcomes, and 3) explore the effects of MHC services on parenting and family functioning/support using a dose-response framework that considered increased fidelity to the treatment model as an increased dose.

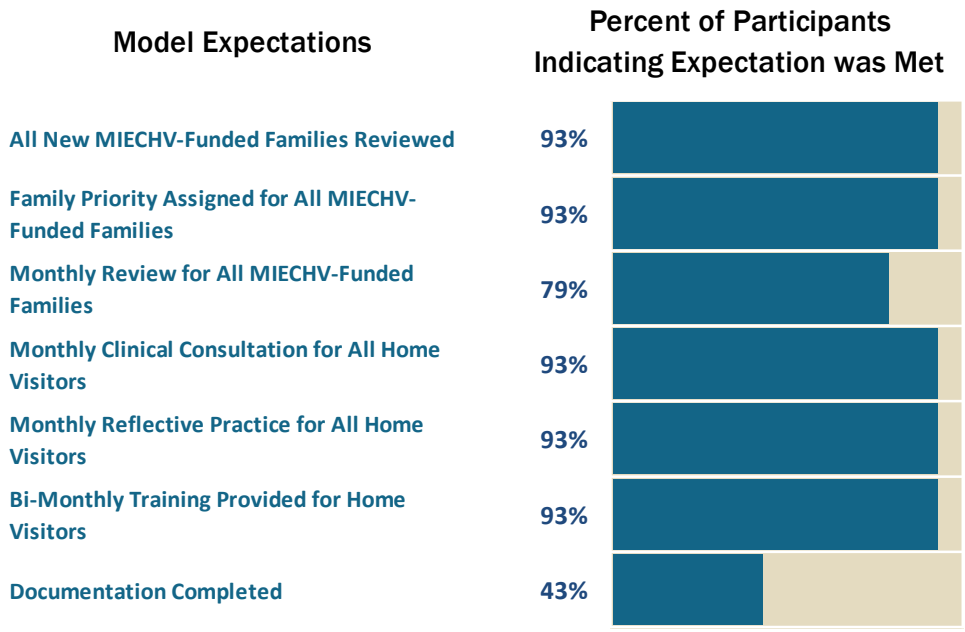
- Research question 1: What are the supporting factors and barriers associated with implementing MHC with fidelity?
- Research question 2: To what extent is MHC fidelity associated with staff outcomes?
- Research question 3: What is the effect of MHC on parenting and family functioning/support outcomes?
    - Do families receiving high fidelity MHC have better outcomes than families receiving low fidelity MHC?
    - Do families receiving MHC have better outcomes than families not receiving the enhancement?



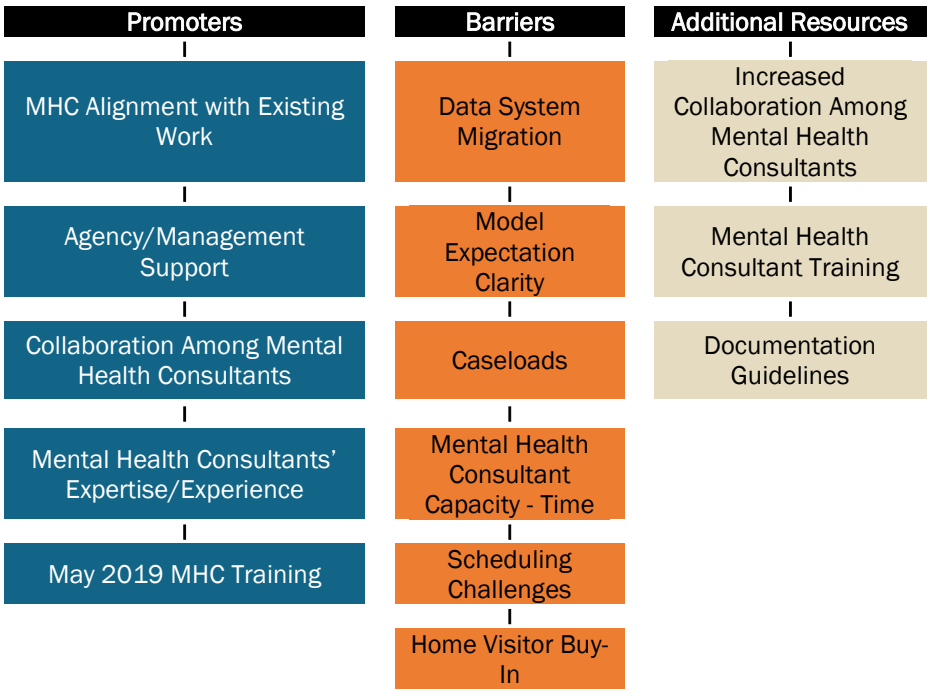
RQ1 - What are the supporting factors and barriers associated with implementing MHC with fidelity?

Major Findings RQ1

MHC fidelity has improved, but some challenges remain related to documentation and reviewing all MIECHV-funded families each month.



The enhancement's alignment with existing home visiting work and support from agency leaders were the greatest promoters of fidelity. A data system migration in spring 2019 and lack of clarity related to model expectations were identified as the greatest barriers. With additional training, collaboration, and resources, program managers and mental health consultants indicated that fidelity can be improved.



Methodology

Design
A qualitative design using semi-structured interviews was employed. The study examined discrepancies between implementation and model expectations, fidelity promoters and barriers, and needed implementation resources.

Data Sources
Responses were drawn from telephone interviews completed using a semi-structured interview guide developed for the project.

Sample
All program managers and mental health consultants from HFI sites serving MIECHV-funded families and implementing MHC were invited to participate. Seven program managers (response rate: 100%) and seven mental health consultants (response rate: 100%) completed the interview.

Analysis
Framework analysis

RQ2 - To what extent is MHC fidelity associated with staff outcomes?

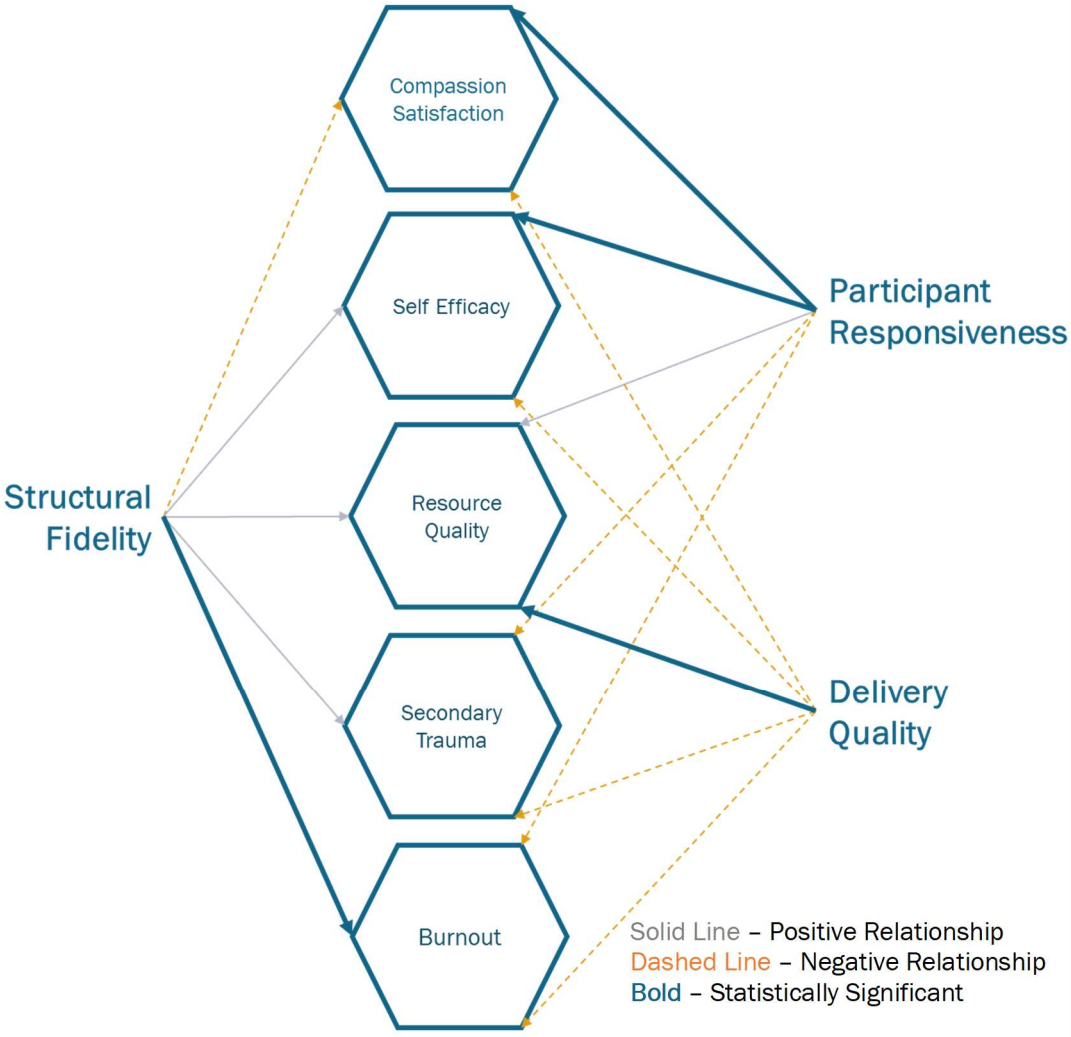
Major Findings RQ2

The model (see graphic below) suggested that the individual aspects of fidelity (i.e., delivery quality, participant responsiveness, structural fidelity) made different, at least partially unique contributions to the home visitor outcomes.

Delivery Quality: There was a large, significant relationship between delivery quality and perceived quality of the resources.

Participation Responsiveness: Increased participant responsiveness (i.e., home visitors' confidence/comfort participating in MHC) was associated with greater self-efficacy (a medium-sized effect) and greater compassion satisfaction (a small effect) among the home visitors.

Structural Fidelity: An increase in adherence to the structural aspects of fidelity (e.g., model adherence and model exposure) was associated with an increase in burnout (a small effect). This relationship suggests that home visitors may find participating in MHC to be demanding and burdensome when it is implemented with fidelity to the model. However, because this was a small effect, these results suggest a need to further explore the obstacles home visitors may encounter.



Methodology

Design
An exploratory, correlational design was employed to examine the relationship between home visitors' ratings of MHC fidelity and ratings of perceived outcomes.

Data Sources
Data were collected through a home visitor survey.

Home visitor scales:
1) *IN MHC Fidelity Scale*
2) *Reflective Supervision Rating Scale*
3) *Reflective Supervision Self-Efficacy Scale for Supervisees*
4) *Professional Quality of Life Scale*
5) *IN MHC Resources Scale*
6) *IN MIECHV Survey for HFI Home Visitors*

Sample
All home visitors from HFI sites serving MIECHV-funded families and implementing MHC were invited to participate in the survey. Seventy-four home visitors completed the survey (response rate = 80%).

Analysis
Partial-least-squares path analysis

Note: No statistically significant negative relationships were observed.

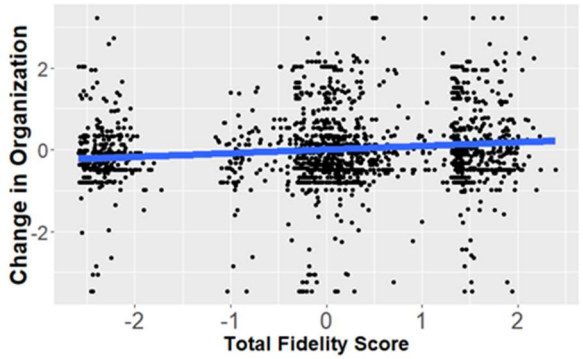
RQ3 - What is the effect of MHC on parenting and family functioning/support outcomes?

Major Findings RQ3

The results suggest that families may benefit from participation in MHC when the enhancement is implemented with high fidelity.

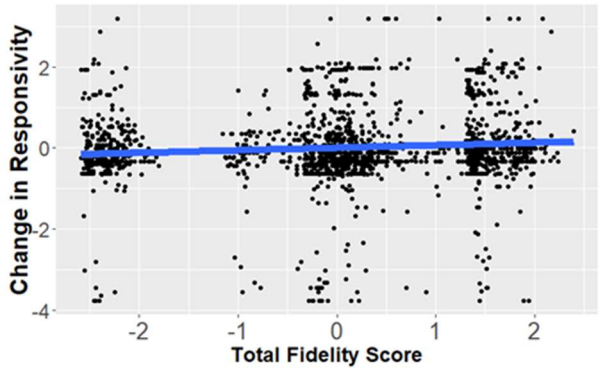
For families receiving MHC, fidelity predicted family outcomes on the HOME scale. Specifically, as fidelity increased, families showed greater improvement on home environment outcomes. However, the effects were small.

HOME - Organization



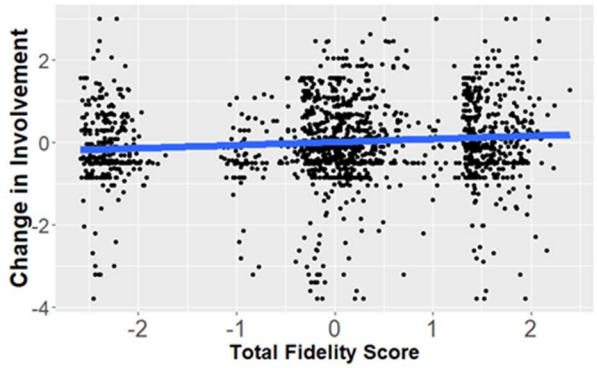
MLM Statistics
b = 0.06, SE = 0.03
β = 0.08, p = .066
fixed effect R^2 = 0.01
fixed + random R^2 = 0.02

HOME - Responsivity



MLM Statistics
b = 0.06, SE = 0.02
β = 0.08, p = .014
fixed effect R^2 = 0.01
fixed + random R^2 = 0.01

HOME – Involvement



MLM Statistics
b = 0.05, SE = 0.04
β = 0.08, p = .170
fixed effect R^2 = 0.01
fixed + random R^2 = 0.02

Methodology

Design
The evaluation team 1) determined the objective and subjective measures of fidelity that were related to family outcomes, 2) created a summary fidelity score for each family drawn from measures of fidelity shown to be predictive of outcomes, and 3) examined whether the fidelity score predicts family outcomes within the MHC treatment group. In a second step, an exploratory quasi-experimental matched comparison groups design was employed. MIECHV-funded families served by home visitors receiving the MHC enhancement were divided into low and high fidelity treatment groups, and each was compared to a separate matched group of non-MIECHV-funded families served by home visitors not receiving the MHC enhancement.

Data Sources
Family outcomes were collected through the *Home Observation for Measurement of the Environment Inventory* (HOME) and the *Healthy Families Parenting Inventory* (HFPI).

Fidelity data were collected through secondary activity reports and home visitor surveys (*IN MHC Fidelity Scale*).

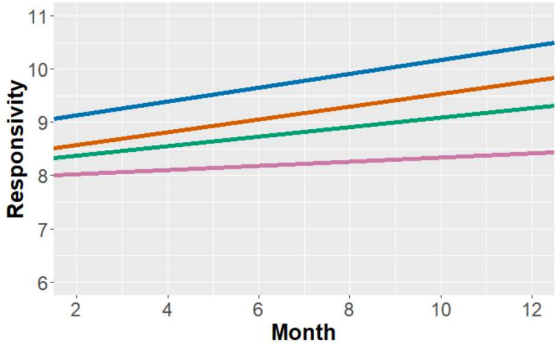
Sample
Low Fidelity: 779 MIECHV-funded enhancement families and 779 non-MIECHV-funded comparison families

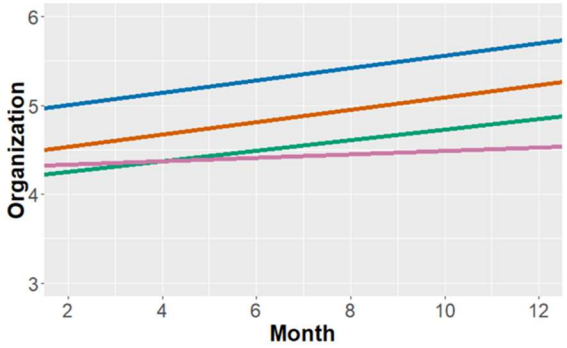
High Fidelity: 487 MIECHV-funded enhancement families and 487 non-MIECHV-funded comparison families

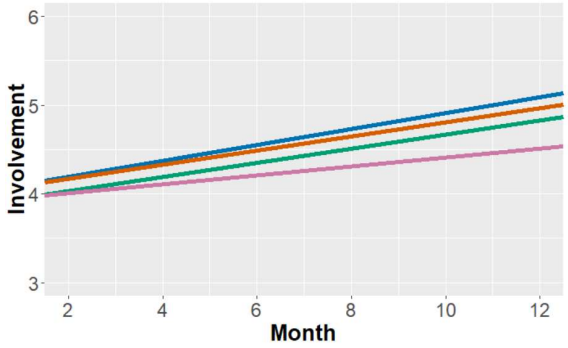
Analysis
Mixed linear modeling (MLM)

Major Findings RQ3 cont.

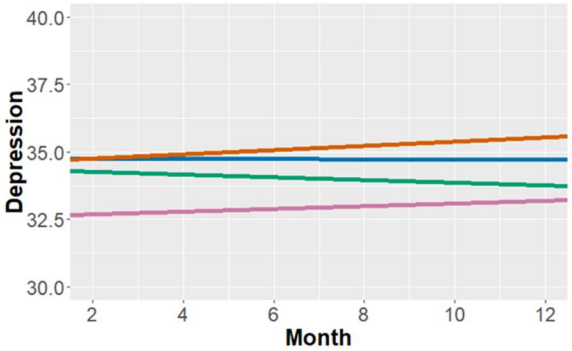
On the HOME, all groups tended to improve over time except the Low Fidelity MHC treatment group, which either did not improve or showed less improvement than other groups.

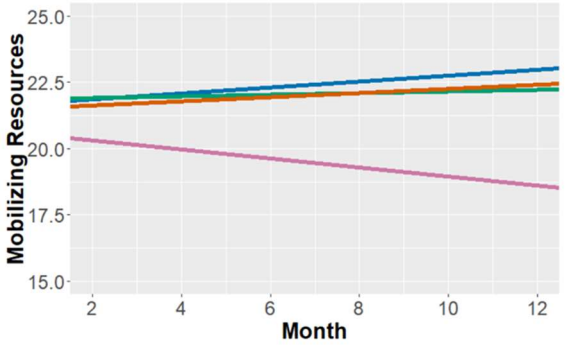


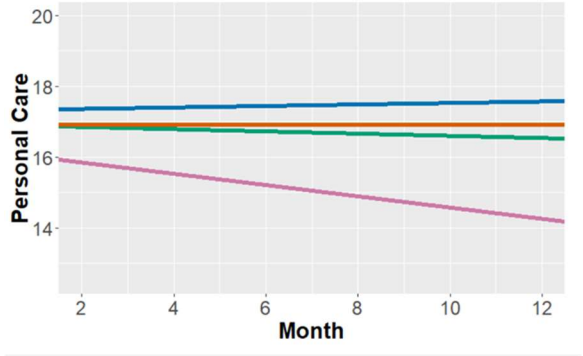




On the HFPI, there were no changes over time for all groups except the Low Fidelity treatment group, which actually worsened over time.







Legend: High Fidelity MHC Enhancement & High Fidelity Comparison – Low Fidelity MHC Enhancement & Low Fidelity Comparison

Two potential interpretations emerged from these results.

1) Because the majority of the total fidelity score was determined by factors occurring at the site level rather than at the family level, it is possible that poor performing sites both have difficulty adhering to the MHC model with fidelity and execute their intervention more poorly.

2) Within the dose-response framework used for the evaluation, increased fidelity to the treatment model is interpreted as an increased treatment dose. Therefore, an alternative possibility is that because MIECHV sites (where MHC is provided) are specifically selected due to their location in high-risk counties, low fidelity MHC families in these sites may represent higher-risk families that essentially did not receive a treatment (i.e., lower fidelity is defined as a lower treatment dose). This may suggest that families from high risk communities not receiving a treatment, or receiving a low-fidelity treatment, may perform more poorly in general than those from lower risk communities. In this case, the fact that the high fidelity MHC treatment group performed the same as its matched-comparison group may indicate that it is actually performing much better than it otherwise would have without the treatment because it is composed of families from high-risk counties.

Implications and Recommendations

Implications

When implemented with fidelity, MHC appears to benefit families and home visitors. Implementing the enhancement with fidelity is essential for improving outcomes for stakeholders, and it is important to focus on multiple aspects of fidelity (e.g., adherence to the model, exposure/duration, quality, participation responsiveness) to maximize benefits.

The results suggest that by increasing MHC fidelity across participating sites, Indiana may experience improved outcomes for families and staff participating in the enhancement; however, given the small effect sizes observed in the FY2018 evaluation, the magnitude of family improvements may be very small as fidelity is increased.

These data have and will continue to inform program-level decision-making in Indiana. These data were used to guide the development of Indiana's FY2020 MIECHV application, particularly through strategies to improve MHC and increase fidelity across sites through a variety of new supports and resources.

Families

1) Increased fidelity was associated with improved *emotional/verbal responsivity* ("the communicative and affective interactions between the caregiver and the child"), *organization of physical and temporal environment* ("how the child's time is organized outside the family house, [and] what the child's personal space looks like), and *parent involvement* ("how the adult interacts physically with the child").

2) When implemented with higher levels of fidelity, MHC may provide some mitigation for negative parenting outcomes experienced by families in high-risk communities.

3) The study identified the model components that are the strongest predictors of improved family outcomes: monthly reviews and clinical risk assignment for families, as well as reflective practice, clinical consultation, and training for home visitors. Moreover, there appears to be a link between longer family participation in MHC and improved outcomes.

Home Visitors

1) Home visitors appear to benefit most from the reflective/relational components of the model.

2) The quality of MHC delivery was positively associated with perceived *quality of resources*.

3) Increased home visitor responsiveness (i.e., comfort/confidence participating in MHC) was associated with greater *self-efficacy* when supporting families and greater *compassion satisfaction* (i.e., job satisfaction related to helping others).

4) While the effect size was small, there was some evidence to suggest that when MHC is implemented with higher levels of structural fidelity, there was greater *burnout* among home visitors, and this finding is important to consider as adaptations to the model are developed.

Implementation

1) Fidelity has improved since it was examined during the FY2016 evaluation, but some challenges remain with documentation and reviewing all MIECHV-funded families each month.

2) At the time of the interviews, strategies to improve fidelity were still in the early stages.

3) With additional training, collaboration, and resources, program managers and mental health consultants believe that fidelity can be improved.

Recommendations

Across all research questions, the findings emphasize the importance of fidelity for improving outcomes for families and home visitors. Greater fidelity to the model is associated with better outcomes, which indicates that continuing to emphasize fidelity is important for the implementation teams at the state level. Grounded in the FY2018 evaluation findings, the following recommendations provide guidance for improving fidelity, measurement, and evaluation.

1

Ongoing Training and Support for MHC Implementation: The findings suggest that sites would benefit from additional training and support that are directly related to completing and appropriately documenting the MHC model expectations. In particular, Indiana should consider training that covers multiple aspects of implementation fidelity, including model adherence, exposure, participant responsiveness, and delivery quality. As applicable, recommendations from mental health consultants and program managers should be considered. These recommendations included increased opportunities for mental health consultants to collaborate, training for mental health consultants that is specific to their MHC role (including reflective practice), and detailed guidelines for documentation.

2

Ongoing Fidelity Monitoring: Consideration may be given to developing strategies to monitor implementation fidelity on an ongoing basis. Doing so would allow leadership to identify implementation issues and make real-time course corrections. Implementation fidelity is improved when program components are defined a priori and monitored for compliance[1].

3

Review and Revision of Model Expectations: The results have provided initial evidence of the extent to which individual model expectations are related to staff and family outcomes. Where applicable, existing fidelity criteria should be reviewed and revised to increase the focus on the model components that have the strongest relationships with program outcomes.

4

Develop and/or Refine Fidelity Instruments: Concerns were noted related to the IN MHC Fidelity Scale, which was developed as part of the FY2018 evaluation. Valid and reliable measures for assessing MHC fidelity are essential for monitoring compliance and ultimately, improving fidelity[2]. Therefore, the development of new tools to assess fidelity should be considered as part of ongoing fidelity improvement.

5

Further Evaluation and Research: The results of this evaluation provided new insight into the role of fidelity in moderating family outcomes and how different stakeholders could benefit from participating in MHC. As such, further evaluation and research should utilize designs that allow outcomes to be examined within the context of fidelity. Given the implementation improvements that mental health consultants and program mangers described, future evaluation should include a focus on MHC implementation after May 2019. Finally, future evaluation should incorporate ongoing examination of the *Depression* subscale from the HFPI. Results from the *Depression* subscale were inconsistent with the theory of change, and additional research is recommended before conclusions can be drawn about the relationship between MHC and depression.

---

[1] Mihalic, S. (2004). The importance of implementation fidelity. *Emotional and Behavioral Disorders in Youth, 4*(4), 83–105.

[2] Prinz, R.J. & Moncher, F. J. (1991). Treatment fidelity in outcome studies. *Clinical Psychology Review, 11(3), 247-266.*

This Executive Summary of the IN MIECHV FY2018 Evaluation Report was supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling $10,911,705.00 with zero percentage financed with nongovernmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS or the U.S. Government.