

Pathways-To-Outcomes: How Healthy Marriage and Relationship Education Program Activities May Lead to Intended Outcomes

June 2020



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OPRE Report #2020-52

June 2020

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Contract number: HHSP23320095642WC

Mathematica reference number: 06997.59C

This report is in the public domain. Permission to reproduce is not necessary. Suggested citation: Friend, Daniel, Scott Baumgartner, Pamela Holcomb, Elizabeth Clary, Heather Zaveri, and Amy Overcash. (2020). *Pathways-To-Outcomes: How Healthy Marriage and Relationship Education Program Activities May Lead to Intended Outcomes*. OPRE Report # 2020-52. Washington, DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

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ACKNOWLEDGMENTS

We wish to thank the Office of Planning, Research, and Evaluation (OPRE) at the Administration for Children and Families (ACF), U.S. Department of Health and Human Services, for its support of this component of the Parents and Children Together (PACT) evaluation. We appreciate the guidance and feedback provided by our project officers: Kathleen McCoy, Kriti Jain, and Samantha Illangasekare. We also benefitted from insightful comments on this report from ACF leadership and senior staff, namely, Naomi Goldstein, Emily Schmitt, Maria Woolverton, and Seth Chamberlain.

Many individuals made important contributions to this study and we are fortunate to have excellent consultants and a strong study team at Mathematica. We would like to thank our research consultants, who shared their insights on several versions of the models and the report: Robert Wood, Robin Dion, José Rubén Parra-Cardona, David Pate, and Virginia Knox. We would also like to thank the practitioners we consulted, who helped ensure the models and this report were relevant to other program operators: Galena Rhoades, Victor Harris, Scott Wetzler, Carly Simpson, and Cynthia MacDuff. We are especially grateful to Mathematica staff. We received invaluable feedback on the models and organization and structure of the report from Sarah Avellar and Debra Strong. We also appreciate Cindy George and Jennifer Brown for their diligent editing; Felita Buckner for her efficient formatting; and Brigitte Tran for her graphic design expertise.

OVERVIEW

Healthy Marriage and Relationship Education (HMRE) programming was initially developed for middle-class, premarital couples as a strategy to improve relationship satisfaction and decrease the risk for divorce. Presently, a large number of HMRE programs for low-income participants are funded by the Office of Family Assistance (OFA) within the Administration for Children and Families (ACF). These HMRE programs serve adult couples¹ with group workshops. Trained facilitators normally deliver curriculum in regularly occurring—typically weekly—interactive classes, using lectures and in-class practice with partners or small groups. According to the current literature, HMRE programs may improve participants' romantic relationships by increasing communication, conflict management, and other relationship skills. In turn, these skills are theorized to lead to improvements in long-term outcomes such as relationship satisfaction or stability and, it is hoped, positive outcomes for the participants' children (Stanley et al, 2020; Wadsworth and Markman, 2012; Williamson et al. 2016). However, there is little research examining this sequencing of outcomes (from skill gains to relationship improvement to child outcomes) in HMRE programs.

Components of each HMRE Pathways-to-Outcomes model

- **Hypothesis:** a summary statement that links key program activities to the intended outcomes.
- **Key program activities:** how grantees design, implement, and support the delivery of their services.
- **Intermediate output:** given that high participation is necessary for couples to experience benefits, each model includes incentives and other participation supports as an intermediate output before describing the intended outcomes.
- **Outcomes:** represent the expected changes for couples following program participation.
- **Influence factors:** define the broader context in which a program operates and underlie every other component of the model; they encompass both personal and environmental factors.

To date, three rigorous federally funded evaluations of HMRE have been completed: Building Strong Families (BSF), Supporting Healthy Marriage (SHM), and Parents and Children Together (PACT). Despite offering important contributions to the body of knowledge on HMRE programs and their impacts, these evaluations have not aimed to identify which program activities contributed to achieving intended outcomes. In light of this gap, ACF directed Mathematica to create a set of HMRE Pathways-to-Outcomes models, which visually depict how HMRE program activities may contribute to intended outcomes.

This report presents three HMRE Pathways-to-Outcomes models for HMRE programs serving adult couples, related to (1) delivering curriculum, (2) maximizing participation, and (3) addressing couple and individual characteristics. We developed the models using information from the federal evaluations, discussions with researchers and practitioners, and a targeted literature search. Although we present the models separately, readers should consider the set of models together and complementarily. Hypotheses for each model are as follows:

- **Improvements on couple functioning outcomes may vary depending on programs' selection and implementation of HMRE curriculum.** Programs may improve outcomes related to couple functioning by selecting an HMRE curriculum that (1) is evidence-informed, (2) is intended for a clearly specified target population, and (3) adequate time to deliver the intended content in a group format. Additionally, the implementation of the curriculum by program facilitators may influence outcomes; specifically, a curriculum delivered by qualified, well-trained facilitators, who are supervised to ensure the curriculum is delivered with fidelity, may improve outcomes related to couple functioning.
- **Increased participation in HMRE curriculum workshops may improve couple functioning outcomes.** Programs may increase participation by selecting and implementing plans that include activities to reduce participation barriers and improve retention. These plans might include (1) case management services, (2) participation supports (such as incentives, child care, and transportation), and (3) flexible workshop scheduling. Building staff–participant relationships/rapport and relationships among participants may also increase participation. Increased participation is expected to lead to better couple functioning outcomes.
- **HMRE programs that account for or address potential couple-level and individual factors such as relationship distress, commitment, race/ethnicity and/or economic disadvantage may be more likely to improve couple functioning outcomes.** Programs that consider how couple and individual characteristics affect all aspects of their program activities—from recruitment to curriculum to partnerships—may be more likely to engage their target populations and provide services more relevant to their lives, which may lead to improved participation, more meaningful program content and delivery, and better couple functioning outcomes.

Although the models presented in this report do not provide causal evidence to link specific program activities to specific outcomes, they are intended to advance the field of HMRE programming and research. These models further the field by depicting evidence-informed hypotheses that practitioners and program developers could use as they design and implement programs. These models could also be used to design research to examine the connections between specific program activities and their impact on participants. Findings from this research could inform practitioners about the effects of specific HMRE program activities.

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I. INTRODUCTION

Overview of Healthy Marriage and Relationship Education (HMRE) programming and research

HMRE programming was initially developed for premarital, mostly middle class, couples as a strategy to improve relationship satisfaction throughout marriage and decrease divorce rates (Wadsworth and Markman 2012; Cowan and Cowan 2014). The initial success of these psychoeducational programs rapidly led to their expansion across the country. Beginning in 2002, the federal government launched the Healthy Marriage Initiative, which created policies and funded programs designed to increase the rate of marriage among those living in poverty, as a strategy to reduce poverty (Karney et al. 2018).

With the passage of the Deficit Reduction Act of 2005, Congress created a dedicated funding stream for HMRE programs, administered by the Office of Family Assistance (OFA) in the Administration for Children and Families (ACF). From 2006 to 2010, 125 HMRE programs were funded through this stream (Zaveri and Baumgartner 2016). The Claims Resolution Act of 2010 reauthorized the HMRE grant program, and from 2011 to 2015 60 HMRE programs were funded (Zaveri and Baumgartner 2016). For the period of 2015 to 2020, OFA is funding 45 HMRE programs (Office of Family Assistance 2019). As a result, in addition to other HMRE programming for middle-income couples, a steady stream of federally funded HMRE programs for largely low-income, at-risk participants has been implemented (Wadsworth and Markman 2012).

Today, federally funded HMRE programs are diverse in the populations they serve (for example, youth/young adults) and in their dose/duration. Federally funded HMRE programs for adult couples, the focus of this report, generally meet weekly for several hours over several weeks to months and are led by a trained facilitator(s) (Halford et al. 2003; Halford et al. 2008). HMRE facilitators generally engage couples through a mixture of lectures and dyadic practice with partners or small groups (Halford 2011).

As suggested by the current literature, the prevailing theory underpinning HMRE programs, which links short- and long-term outcomes is as follows: Immediately after participating in an HMRE program, couples may experience improvements in conflict management and relationship skills. These changes should then lead to improvements in other couple functioning domains

Immediately after participating in an HMRE program, couples may experience improvements in conflict management and relationship skills. These changes should then lead to improvements in other couple functioning domains.

(such as satisfaction and stability) through continued use of the skills and application of the knowledge gained in the HMRE program (Stanley et al, 2020; Wadsworth and Markman 2012; Williamson et al. 2016). While HMRE programming is guided generally by this theory (Halford and Pepping 2017; Halford and Snyder 2012; Wadsworth and Markman 2012), only one study has examined this sequencing of short- to long-term outcomes in HMRE programs (Williamson et al. 2016).² Federal evaluations have examined the overall impacts of HMRE programs on these outcomes at multiple time points. However, while federal evaluations have sometimes defined outcomes in the short- and long-term categories (as described here), none has examined if short-term outcomes mediated the relationship between participation in the HMRE program and long-term outcomes.

To date, three rigorous federal evaluations of HMRE programs have been completed: Building Strong Families (BSF), Supporting Healthy Marriage (SHM), and Parents and Children Together (PACT). A fourth, Strengthening Relationship Education and Marriage Services (STREAMS), is currently underway, as are a large set of HMRE grantee-led evaluations. The completed federal evaluations examined HMRE programs for low- to moderate-income couples and found inconsistent results. Across all sites participating in the evaluations, findings ranged from modest, positive improvements to no effects or even negative effects (Table I.1; Hsueh et al. 2012; Lundquist et al. 2014; Moore et al. 2018; Wood et al. 2010; Wood et al. 2012).

Table I.1. Summary of rigorous, federally funded HMRE program evaluations

Program/study	Study sample	Follow-ups	Key findings
Building Strong Families (Wood et al. 2010; Wood et al. 2012)	Low-income, unmarried parents at eight sites; 5,102 couples	15 and 36 months after enrollment	No effects on relationship quality or status overall. Modest negative effects on father involvement at 36 months. Positive effects on relationship status and satisfaction, conflict management skills, and intimate partner violence at 15 months that generally did not persist at 36 months.
Parents and Children Together (Moore et al. 2018)	1,595 low-income married and unmarried couples in two sites	12 months after enrollment	Small positive effects on relationship quality, commitment, avoidance of destructive conflict behaviors, and relationship status.
Supporting Healthy Marriage (Hsueh et al. 2012; Lundquist et al. 2014)	Low-income, married parents in eight sites; 6,298 couples	12 and 30 months after enrollment	Small positive effects on relationship quality and declines in psychological abuse and psychological distress at 12 and 30 months. No effects on relationship status.

Studies of the effectiveness of HMRE programs outside the federal evaluations have yielded mixed results. Several early studies found that relationship skills education can improve the quality of middle-class married couples' relationships (Hawkins et al. 2008). However, meta-analyses of HMRE programs for lower-income couples (which have included findings from the federal evaluations) have not always replicated these findings (Arnold and Beelman 2018; Hawkins and Erickson 2015). In a recent review, one set of scholars judged that the HMRE field had enough positive findings to justify continued implementation and evaluation, but too many null or negative findings to consider HMRE totally successful (Cowan and Cowan 2014). Some have suggested that the inconsistency in results may be explained by exploring theories and mechanisms of change associated with HMRE (for example, Wadsworth and Markman 2012), as this report aims to do.

Purpose of this report

Despite offering important contributions to the body of knowledge on HMRE programs, these prior evaluations did not aim to identify which program activities contributed to any achieved outcomes. In light of this gap, ACF directed Mathematica to create the HMRE Pathways-to-Outcomes models described in this report to explore how and why programs for couples may achieve different outcomes and to examine the potential links between program activities and outcomes. The Pathways-to-Outcomes models use information from the evaluations and HMRE researcher and practitioner review and input to suggest how specific program activities may contribute to the intended outcomes. The goal was to develop a series of models that visually link program activities to outcomes.

These models may help researchers form specific questions for future research aimed at further improving HMRE programs and advancing the field.

By identifying possible connections between programs' activities and their intended impact, practitioners and program developers could consider these hypotheses as they design and implement programs. Additionally, researchers can generate testable hypotheses about the connections between specific program activities and their impact on participants. Testing these hypotheses could allow researchers and practitioners to better understand the HMRE program activities responsible for observed outcomes. Therefore, these models may help researchers form specific questions for future research aimed at further improving HMRE programs and advancing the field.

What are Pathways-to-Outcomes Models?

Pathways-to-Outcomes models visually depict how program activities may lead to specific outcomes. They use evaluation findings to identify program impacts and activities that are conceptually related. The Pathways-to-Outcomes models were designed for use by a broad audience, including practitioners in the HMRE field. As a result, the Pathways-to-Outcomes models aim to provide information on the activities HMRE programs may undertake to work towards the expected outcomes. The Pathways-to-Outcomes models show only the activities and outcomes relevant to a specific hypothesis—whereas other types of models may include a broader set of activities, outcomes, and other factors. The set of Pathways-to-Outcomes models are related to each other and should be considered together.

Report road map

The remainder of this report is organized as follows: Chapter II describes our methods and process for developing the models, Chapter III introduces the model template, Chapter IV presents three HMRE models and a detailed discussion of each model, and Chapter V discusses considerations for future research and programming.

II. METHODS

To inform the development of the Pathways-to-Outcomes models presented in this report, we selected three programs from the pool of sites participating in federal evaluations and reviewed the federal evaluation literature associated with each. The three HMRE programs each participated in two of three federal evaluations (Table II.1). These evaluations included large-scale impact studies and in-depth implementation studies. Table II.2 shows the program-specific results for these studies.

Table II.1. HMRE programs and the federally funded studies they participated in

Organization	Program	Location	PACT	SHM	BSF
El Paso Center for Children	The HOME Program	El Paso, Texas	✓	✓	-
University Behavioral Associates	Supporting Healthy Relationships	New York, New York	✓	✓ ^a	-
Public Strategies, Inc.	Family Expectations	Oklahoma City, Oklahoma	-	✓	✓

Note: BSF and SHM evaluated healthy marriage programs only. PACT evaluated integrated HMRE and economic stability services.

^a The program was called “Supporting Healthy Marriage” for the SHM evaluation.

Table II.2. Impacts by program from the federal evaluations

Program	Evaluation	Short term							Long term						
		Communication	Relationship skills	Satisfaction	Stability	IPV	Co-parenting	Parenting practices	Communication	Relationship skills	Satisfaction	Stability	IPV	Co-parenting	Parenting practices
Family Expectations	BSF	-	-	✓	-	-	✓	✓	-	-	-	-	-	-	-
	SHM	✓	-	-	-	-	-	-	-	✓	✓	-	-	-	✓
HOME	SHM	✓	-	✓	✓	✓	-	-	✓	✓	✓	-	✓	-	✓
	PACT	-	✓	-	✓	NR	-	NR	NR	NR	NR	NR	NR	NR	NR
Supporting Healthy Relationships	SHM	✓	-	✓	-	✓	-	-	✓	-	-	-	-	-	✓
	PACT	-	✓	✓	✓	NR	✓	NR	NR	NR	NR	NR	NR	NR	NR

Sources: For BSF: Moore et al. 2012; Wood et al. 2010. For SHM: Hsueh et al. 2012; Lindquist et al. 2014. For PACT: Moore et al. 2018.

✓ Significant impact.

- Not significant.

BSF = Building Strong Families; IPV = intimate partner violence; NR = not reported; PACT = Parents and Children Together; SHM = Supporting Healthy Marriage.

In addition to evaluation findings, to develop the Pathways-to-Outcomes models, we drew upon discussions with researchers and practitioners and a targeted literature search.³ From these sources, we identified activities that were likely to be associated with their intended outcomes. We looked at the measured outcomes among the three HMRE programs and based on the information for our review of the federal evaluation literature—that is the programs' key activities and their implementation—we generated evidence-informed hypotheses. Below we describe our model development process (which is depicted in Table II.3):

1. **Reviewed federal evaluation documents.** To develop initial the models for the HMRE programs, we reviewed research documents from BSF, SHM, and PACT.
 - **BSF** (2002–2013): Interim and final process study reports documented the design and implementation of Family Expectations. The final implementation study report included a detailed profile of Family Expectations and discussed findings from qualitative interviews with couples. An impact report described program-level impacts that Family Expectations had on the status and quality of couples' relationships 15 months after they enrolled in the program. A separate impact report described impacts at 36 months after enrollment.
 - **SHM** (2003–2014): Early and final implementation reports detailed the design and implementation of Family Expectations, Supporting Healthy Relationships, and the HOME Program, and proposed an overall theory of change for the programs participating in the evaluation. The early implementation report included detailed program profiles. A working paper also described findings from qualitative interviews with couples about their experiences with the relationship education programs. An early impact report measured impacts on couples' relationships 12 months after program enrollment for a pooled sample of SHM participants. The final impact report measured impacts 30 months after enrollment and included an exploratory analysis of program-specific impacts.
 - **PACT** (2011–2019): An implementation study report contained detailed profiles of the Supporting Healthy Relationships and HOME programs. An impact report impacts on couples' relationships 12 months after program enrollment for a pooled sample of participants in the programs, and included an exploratory analysis of program-specific impacts.

2. **Developed detailed program-specific models.** We coded and synthesized information in the documents identified above to populate detailed program models, one for each of the programs in Table II.1. We designed the detailed program models to organize and synthesize program information and to provide a first step toward identifying potential links between program activities and outcomes. The models incorporated information on influence factors (such as public policy, community/ neighborhood factors), and individual and interpersonal factors. They also contained detailed information about key activities for each program. The outcomes section included all reported outcomes found in the study impact reports. For each program, we indicated whether each outcome changed and the direction and statistical significance of the change.
3. **Consulted with research experts.** We held webinars with research experts for HMRE where we introduced the Pathways-to-Outcomes work and presented the program-specific models. We asked the experts for feedback on (1) whether identified pathways between program activities, proximal outcomes, and distal outcomes were plausible; (2) whether the models were complete, were missing, or were missing key information (such as key program activities); (3) recommendations for literature for the team to review; and (4) the potential value of the models to practitioners and researchers. The research experts appreciated the models and thought they were complete. But, recognizing the changing landscape of HMRE programs, the research experts suggested that evidence-informed models that linked specific program activities to intended outcomes would be more useful to the field. This type of model would enable researchers and grantees to identify opportunities to strengthen programs and develop specific strategies for targeted outcomes.
4. **Developed hypotheses to link program activities to outcomes.** We used the information collected in the program-specific models to identify activities that might have produced positive changes in the outcomes. First, we identified a common set of outcomes across the programs and evaluations. This set of outcomes generally moved in the expected direction (for example, increased relationship satisfaction and decreased incidence of intimate partner violence) but may or may not have statistical significance. We also focused on outcomes that aligned with the activities offered by the programs in all evaluations. As a result, we

Recognizing the changing landscape of HMRE programs, evidence-informed models that linked specific program activities to intended outcomes would be useful to the field.

focused on couple functioning outcomes as the primary services related to improving couples' relationships. We did not include outcomes related to employment and economic stability as only PACT required programs to provide related services. We also did not include child outcomes as the primary services do not directly address child-related outcomes, rather these outcomes are theorized to improve as a result of changes to the couples' relationship (Dion 2005; Wadsworth and Markman 2012). We categorized outcomes related to conflict management and relationship skills as short term-outcomes. We categorized other outcomes related to couple functioning (for example, relationship satisfaction) as long-term outcomes. This order aligns with the prevailing theory of how HMRE programs work (Stanley et al, 2020; Wadsworth and Markman 2012).

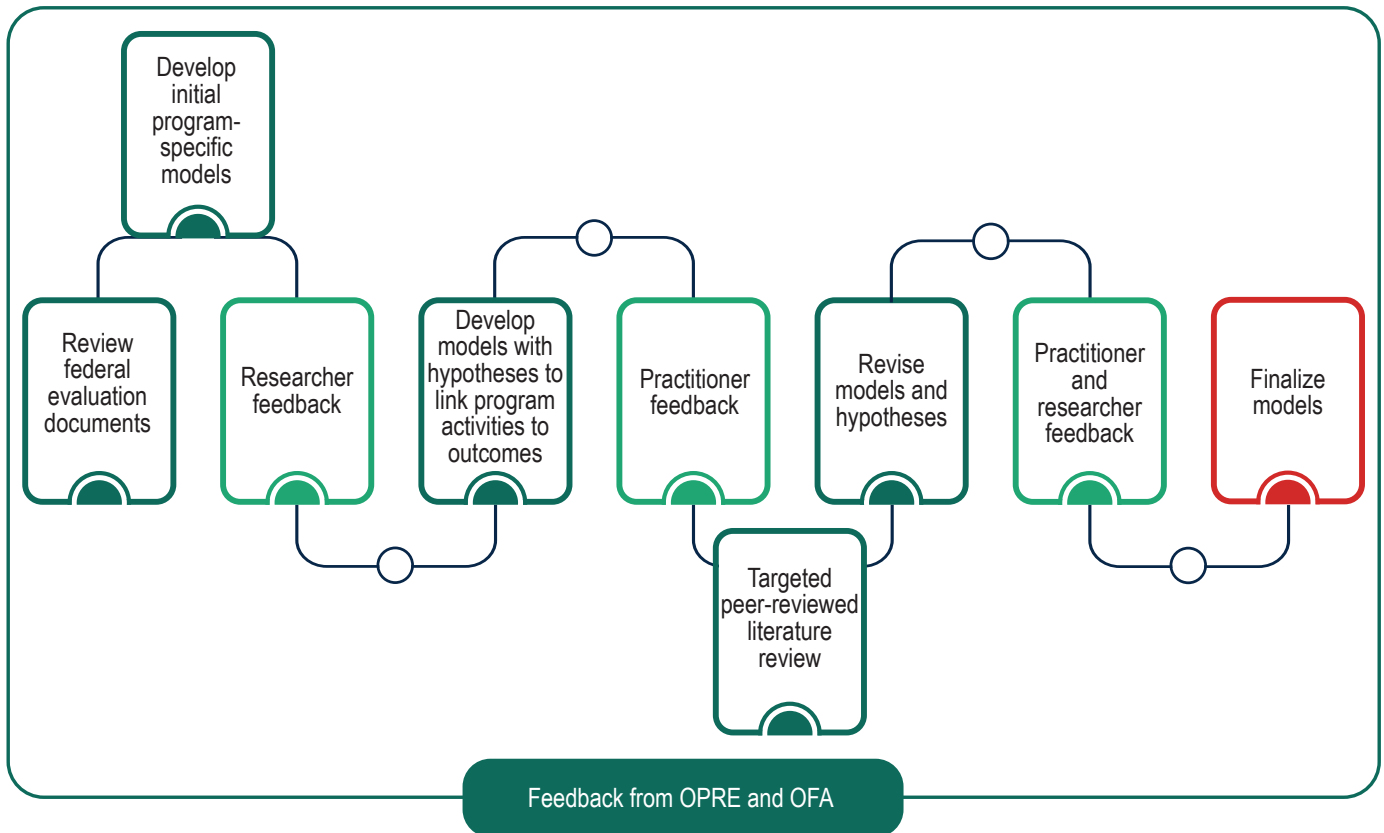
After we identified outcomes, we reviewed each program model for activities that might be related to or important for achieving them. For example, all the federal evaluations included outcomes related to conflict management skills. Programs in the federal evaluations aimed to change these outcomes through delivery of HMRE curricula. We also identified potential influence factors in the program-specific models that were relevant to the activities and outcomes, such as descriptions of the community that made it challenging for couples to participate in the program or characteristics of the couples that program staff perceived as being important. We then reviewed the final set of activities, outcomes, and influence factors to develop hypotheses that linked activities and outcomes. We used the findings and recommendations from federal evaluation implementation and impact reports to guide development of hypotheses. For example, the impact and implementation reports often discussed curricula development. Based on those findings, we developed the hypothesis on curricula.

We used the findings and recommendations from federal evaluation implementation and impact reports to guide development of hypotheses.

5. **Solicited practitioner feedback.** Practitioners from programs in the federal evaluations and other HMRE programs provided input on (1) how well the models resonated with their experience in delivering these programs, (2) whether the models were missing any key program activities, and (3) how to refine and clarify the models to make them more useful to practitioners.

6. **Conducted targeted literature searches.** Along with engaging practitioners, we conducted targeted peer-reviewed literature searches to help refine, inform, and support our hypotheses. We looked for meta-analyses and other literature to fill in knowledge gaps and inform our influence factors (see Appendix A for our literature search methodology).
7. **Reviewed models with practitioners and researchers.** Before finalizing the models, we consulted the same set of practitioners and researchers who provided feedback in the previous steps.

Figure II.1. **Process for developing Pathways-to-Outcomes models**



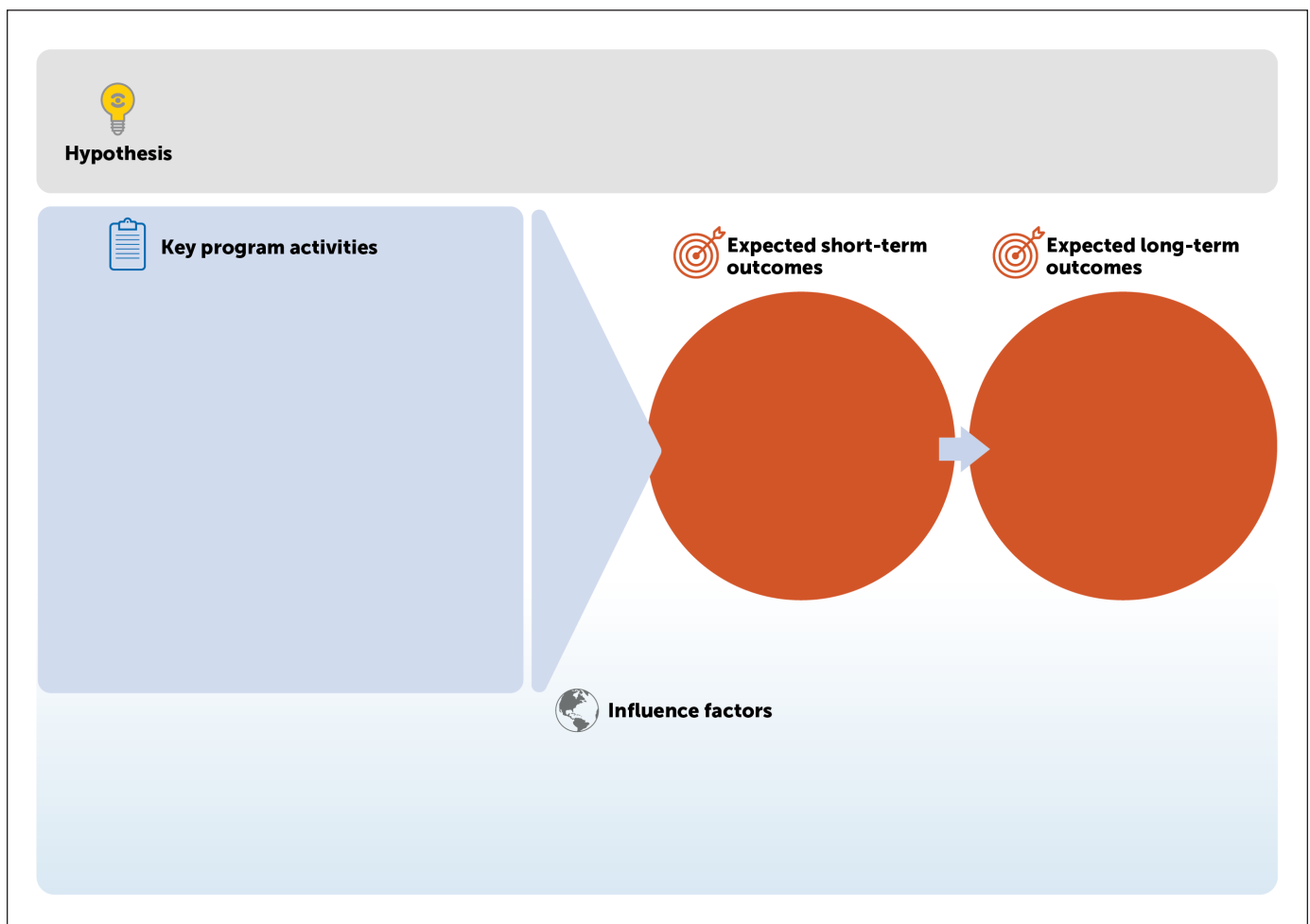
III. PATHWAYS-TO-OUTCOMES MODEL TEMPLATE

Each Pathways-to-Outcomes model reflects an aspect of program design and implementation: (1) curriculum and delivery, (2) maximizing participation, and (3) addressing influence factors. Each model includes the following components (see Figure III.1):

- **Hypothesis.** The hypothesis is a summary statement that links key program activities to the short- and long-term expected outcomes.
- **Key program activities.** Key program activities are what grantees do to design, implement, and support the delivery of their services. Activities include program components and strategies. Program components are the actual services provided, such as the core workshops. Program strategies refer to how programs deliver those services, such as frontloading parenting content in the workshops.
- **Intermediate participation output.** High participation is necessary for couples to experience benefits (Hansen et al. 2002; Yalom and Leszcz 2005). Each model includes incentives and supports for intensive, high-dosage participation as an intermediate output in the head of the arrow between key program activities and short-term outcomes.
- **Outcomes.** Outcomes represent the expected changes for couples following program participation. We classified outcomes as either short term or long term to indicate the expected timing of the changes, based on the theoretical basis of HMRE presented in Chapter I of this report (Wadsworth and Markman 2012). Short-term outcomes were associated with relationship and conflict management skills, and long-term outcomes were associated with couples functioning outcomes, such as relationship satisfaction. Because this sequencing of outcomes has not been rigorously evaluated, we do not have precise timing for when short- and long-term outcomes should be measured. In federal evaluations, short-term outcomes were measured 12 to 18 months after program enrollment, and long-term outcomes were measured at 36 months or later. Outside of the federal evaluations, the distinction between short- and long-term outcomes becomes less stringent. For example, some studies include an immediate post-test assessment and a six-month assessment.

- Influence factors.** Influence factors define the broader context in which a program operates and include personal and environmental factors. In the models, we organized personal and environmental factors into personal characteristics, couple characteristics, and context. Personal characteristics include individual attributes or experiences, such as employment history and exposure to trauma. Couple characteristics include aspects of relationships such as cohabitation, relationship stability, and co-parenting. Context also describes the community in which the program operates. It can include the available services and organizations in the community, as well as infrastructure (such as transportation). Influence factors may affect the development of program activities and implementation, or even the outcomes that programs might expect to see (Fixsen et al. 2005). For this reason, influence factors underlie every other component of the model.

Figure III.1. **Healthy marriage and relationship education Pathways-to-Outcomes model template**



The models are intended to advance the field of HMRE programming and research by depicting evidence-informed hypotheses that could be used by practitioners and program developers and tested in future evaluations. The pathways suggested in the models have the following limitations:

- **The pathways are hypothesized to represent causality, but do not reflect causal evidence.** As discussed earlier, the hypotheses were developed on the basis of impact studies. Those studies tested only the impact of the programs as a whole—not the influence of individual program activities or groups of program activities on outcomes.
- **The models do not present an exhaustive list of program activities or influence factors that could affect outcomes.** The models only include activities that the three programs implemented. Other programs may implement other activities tailored to the populations they serve and the contexts in which they operate. Further, we did not conduct a moderator analysis to assess how influence factors may have affected the hypothesized pathways.

IV. HEALTHY MARRIAGE PATHWAYS-TO-OUTCOMES MODELS

This chapter describes three Pathways-to-Outcomes models and their associated hypotheses. The models address (1) delivering curriculum (Figure IV.2), (2) maximizing participation (Figure IV.3), and (3) addressing influence factors (Figure IV.4). For each model, the outcomes are the same. Therefore, we describe the short- and long-term outcomes below, instead of with each model. Readers should consider the set of models together and complementarily. However, for the sake of clarity and ease of interpreting the models, we chose to present them separately.

Readers should consider the set of models together and complementarily.

Based on our literature review, HMRE programs generally intended to impact six outcome domains related to couple functioning (Arnold and Beelman 2018; Hawkins and Erickson 2015; Wadsworth and Markman 2012). We based the distinction between short-term and long-term outcomes on the theoretical basis of HMRE discussed in Chapter I.

Short-term outcomes

1. **Conflict management and communication knowledge and skills.** Participation in the HMRE program is hypothesized to increase couples' knowledge and use of constructive conflict management techniques, decrease the use of destructive communication behaviors, and increase the understanding of how destructive techniques affect the relationship (Hawkins et al. 2008; Hawkins and Erickson 2015; Wadsworth and Markman 2012). Constructive skills include active listening and validation techniques such as paraphrasing. Destructive behaviors include defensiveness, contempt, harsh criticism, or withdrawal and disengagement from conflict without a resolution, also known as stonewalling.
2. **Healthy relationship skills.** Participation in an HMRE program is hypothesized to increase a variety of positive relationship skills (Hawkins et al. 2008; Hawkins and Erickson 2015; Wadsworth and Markman 2012). Positive relationship skills could include increasing emotional and sexual intimacy, trust, commitment, hope, and changing gender stereotypes or misconceptions and myths regarding relationships or marriage.

Long-term outcomes

1. **Relationship satisfaction.** HMRE programs are also expected to increase relationship satisfaction or happiness through the sustained use of positive relationship and conflict management skills (Hawkins et al. 2008; Hawkins and Erickson 2015; Wadsworth and Markman 2012). Alternatively, HMRE programs may attempt to prevent future problems by helping highly satisfied couples remain so (Wadsworth and Markman 2012). In the federal evaluations, relationship satisfaction is defined by self-reported happiness with the participant's current romantic relationship.
2. **Relationship stability.** Participation is hypothesized to improve relationship stability or keep couples romantically involved. This could be defined in several ways. Programs for unmarried couples might seek to promote marriage and increase the odds of marriage after participating in HMRE (Hawkins et al. 2008; Hawkins and Erickson 2015; Wadsworth and Markman 2012). Alternatively, programs may simply aim to keep couples cohabitating, romantically involved, and faithful regardless of marital status. Some programs may even seek to help highly distressed couples dissolve their relationship amicably and co-parent after the dissolution (Rhoades et al. 2011). Other programs may also help participants exit dangerous relationships safely (for example, those experiencing severe, frequent intimate partner violence [IPV]; Knopp et al. 2017; Rhoades and Knopp 2016).
3. **Intimate partner violence.** For some couples, participation in HMRE programs is theorized to decrease the incidence of IPV (Bradley et al. 2011; Stith et al. 2011). This includes a reduction in psychological aggression or abuse as well as physical and sexual violence. HMRE programming is not appropriate for couples experiencing high levels of IPV, but some programs serve couples with low levels of IPV, and there are several HMRE programs specifically designed for couples experiencing low-level IPV (Bradley et al. 2011; Stith et al. 2011).
4. **Co-parenting and parenting style.** Participation is expected to improve the co-parenting relationship. This is typically defined as cooperation and communication between the individuals within a couple regarding the parenting of children. Individual parenting style is also

thought to change through HMRE participation. Several researchers have hypothesized that improvements in couple functioning lead to improvements in parenting practices (Adler-Baeder et al. 2013, 2018; Clark et al. 2013). Parenting practices may be defined as communication and time spent with the child, use of harsh parenting, financial support of children, and father involvement.

It should be noted that this reasoning is largely theoretical because long-term research, aside from the federal evaluations, is lacking. The meta-analyses we reviewed noted the lack of studies with long-term follow-ups (Arnold and Beelman 2018; Hawkins and Erickson 2015).

Model 1: Delivering curriculum

HMRE curricula have many relevant components that may influence this hypothesized pathway. Based on our review of the federal evaluation literature, we focused on specifying the following elements, described more fully in the next section:⁴

- **The evidence base.** The curricula used in the federal evaluations all had some evidence of effectiveness (varying in rigor).
- **Hours offered (or program length).** The curricula used in the federal evaluations offered a minimum of 18 hours of workshop time.
- **Relevance to the target population.** Several programs served specific targeted populations

Hypothesis

Couple functioning outcomes may improve through programs' selection and implementation of HMRE curriculum. By selecting HMRE curriculum that (1) is evidence-informed, (2) is intended for a clearly specified target population, and (3) includes adequate time to deliver the intended content in a group format, programs may improve outcomes related to couple functioning. Additionally, the implementation of the curriculum by program facilitators may influence outcomes; curriculum delivered by qualified, well-trained facilitators who are supervised to ensure the curriculum is delivered with fidelity may improve outcomes related to couple functioning.

The implementation of the curriculum can also affect outcomes (Fixsen et al. 2005). Therefore, we also identified several factors related to the facilitators who are responsible for delivering the curriculum and included them in the model (Figure IV.2). Implementation science states that evidence-based programs need appropriate staff selection criteria, and that programs should provide staff training and supervision (Fixsen et al. 2015). Programs with thorough staff selection criteria and processes will more likely select well-qualified staff capable of delivering the program. Furthermore, these staff members should receive program-specific training designed to give them skills and knowledge to implement the program competently. Finally, staff members need supervision to ensure program quality and curriculum fidelity. All the programs in the federal evaluations had specific criteria for hiring and training facilitators to deliver curricula, as well as methods for supervising them and monitoring fidelity.

a. Key program activities

This section describes the activities that programs might want to consider implementing to improve couple functioning outcomes. These activities can be broken into two overarching components: the curriculum and the facilitators who implement the curriculum.

Curriculum

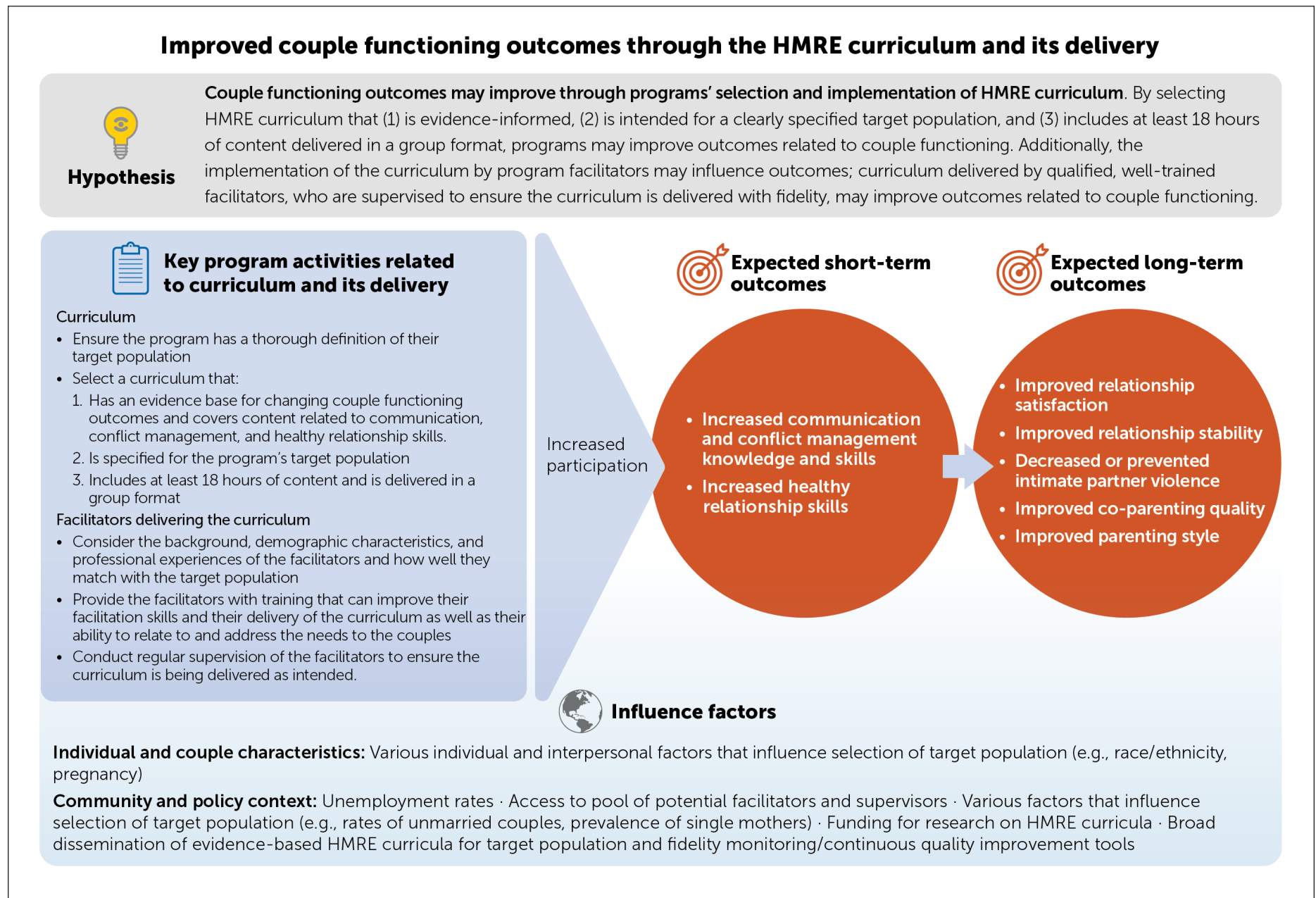
Selecting evidence-informed curricula may improve outcomes.

Some HMRE curricula have been evaluated using experimental designs and have demonstrated modest effects with middle- and high-income populations (Arnold and Beelman 2018; Hawkins et al. 2008; Hawkins and Erickson 2015). In BSF and SHM, researchers and program leaders sought curricula that had a solid theoretical foundation and some evidence of effectiveness for couple functioning outcomes (Dion et al. 2010; Gaubert et al. 2012). The two programs in PACT continued to use the curricula developed for BSF and SHM that had shown some initial success.

Adapting or tailoring curriculum to a target population may improve outcomes.

If evidence-based curricula are available, programs should use those specifically designed for their planned target populations. This practice should help ensure that the curriculum content is relevant to the potential participants. If such a curriculum is not available, programs should consider adapting an existing evidence-based curriculum.

Figure IV1. **Delivering curriculum**



The programs in both BSF and SHM adapted their curricula. The original curricula identified were often didactic in nature and intended for highly educated, middle-income couples. In BSF, developers of existing curricula made revisions for low-income couples. They kept the majority of the original content but made the curriculum more hands-on and interactive and used examples meaningful for low-income unmarried parents (Dion et al. 2010). SHM conducted similar activities, adapting selected curricula to make them more interactive and relevant to low-income married couples (Gaubert et al. 2012). In multiple federal evaluations, programs served a large proportion of Spanish-speaking couples, particularly in SHM and PACT with the HOME Program (Zaveri and Baumgartner 2016). As a result, program materials needed translation and other adaptations for Hispanic/Latino populations.

Aside from the federal evaluations, other HMRE programs have also made adaptations for various populations. A review of Strengthening Families Evidence Review (SFER) shows many programs for specific populations such as military couples (Stanley et al. 2010), couples experiencing IPV (Bradley et al. 2011), step-families (Higginbotham and Skogrand 2010), and Hispanic couples (Dyer et al. n.d.). For many of these programs, the curriculum developers made adaptations to existing curricula to serve a specific target population. However, it should be noted that the evidence of their effectiveness varies (Avellar et al. 2012).

Delivering the curriculum in a group setting and offering adequate time to deliver the intended content may improve outcomes.

HMRE is commonly delivered in group settings. The group setting is a feature of the curriculum that may promote peer learning and relationships (Kivlighan et al. 2017).⁵ All programs in the federal evaluations administered the curriculum in a group-based setting with 6 to 15 couples.

Programs can deliver curricula in a variety of formats, such as longer sessions over a shorter duration or shorter sessions over a longer duration, but our review found no research that linked format to participation or outcomes. HMRE programs typically deliver the curriculum in weekly sessions over several months (for example, eight weeks of two-hour weekly sessions). Some programs in SHM and PACT offered an alternate, compressed format, meeting for longer sessions (four or more hours) on the weekends for three to four weeks. Researchers in BSF speculated that the shorter curriculum offered by

Family Expectations and the fact that it was offered in larger doses could have been part of that program's success relative to the other BSF sites (Wood et al. 2010). Compared to other BSF programs, which only offered two-hour weekly sessions, Family Expectations offered its curriculum in multiple formats in three- or five-hour sessions (Dion et al. 2010). Family Expectations also used a curriculum that could be completed in 6 or 10 weeks, whereas the curricula in other programs took approximately five months to complete.

A meta-analysis of programs for couples concluded that longer programs were more effective than shorter ones. Specifically, it found that curricula offering 9 to 20 hours of content were associated with greater improvements in couple functioning outcomes than curricula offering fewer than 9 hours (Hawkins et al. 2008). However, this meta-analysis was conducted on programs serving middle- to higher-income couples. Meta-analyses on programs serving low-income couples did not discuss dosage (Hawkins and Erickson 2015; Arnold and Beelman 2018). The programs in the federal evaluations offered 18 to 30 hours of HMRE content.

Facilitators

Programs should provide facilitators with formal training on the curriculum and consider additional trainings to bolster facilitation skills. Training facilitators can increase their skills to deliver the curriculum with quality. The programs reviewed in the federal evaluations formally trained facilitators on their curriculum. Although few training practices have been rigorously evaluated, one study found that facilitators formally trained on the curriculum were more effective than those who were informally trained (Allgood and Higginbotham 2013).

Training facilitators can increase their skills to deliver the curriculum with quality.

HMRE programs may also find it useful to provide additional trainings outside the curriculum. The programs in the federal evaluations also trained facilitators in additional topics; the goal was to prepare them to be responsive to the varied needs of the participants. These training topics commonly included addressing and responding to IPV and case management techniques. Researchers have also recommended training in motivational interviewing, cultural competency, empathy, and bonding, and in the unique needs of their target population (Allgood and Higginbotham 2013; Bakhurst et al. 2017; Busby et al. 2015; Ketring et al. 2017).

Programs should regularly supervise their facilitators and monitor their fidelity to the curriculum content. Implementation science suggests that for an evidence-based program (or curriculum) to achieve desired outcomes, it must be delivered as intended, or with fidelity (Fixsen et al. 2005). To achieve fidelity, programs need to monitor delivery of the curriculum. The programs reviewed from the federal evaluations most often used facilitator observations to provide supervision and monitor fidelity. In general, a senior, more experienced facilitator or supervisor observed facilitators for several sessions during each workshop. One curriculum developer worked closely with facilitators in BSF and SHM. This developer used videotapes to review and provide feedback to facilitators in regular conference calls and in writing. Facilitators were not officially “certified” in the curriculum until they submitted a sufficient number of videotapes with minimal issues.

Programs should consider the characteristics of their facilitators. The characteristics and qualities of a facilitator determine how the participant–facilitator relationship forms and influence curriculum delivery (Fixsen et al. 2015; Horvath and Luborsky 1993). For example, facilitators who lack experience with the target population or are unfamiliar with HMRE or similar curricula may lack the skills or experience needed to form relationships with the participants, which may influence the quality of delivery.

HMRE programs in the federal evaluations and those found in our literature search had some overlapping preferred characteristics, but our research found no clear guidance on the desired characteristics of an effective facilitator. In the federal evaluations and those reviewed in SFER, the programs preferred facilitators with a background in social services, but only a few required a degree in a social service-related field (for example, social work or psychology). Some programs also preferred that facilitators have familiarity with and connections to the community or hired some former program graduates. A few studies in SFER mentioned hiring community leaders and clergy as facilitators. Programs in PACT also had facilitators who belonged to the same racial and ethnic groups as the participants. The programs we reviewed also preferred male/female facilitator teams and, when possible, married-couple teams. One study highlighted the potential importance of programs preferring male/female facilitator teams. This research found that a gender match between facilitators and participants predicted a stronger alliance between the two (Ketring et al. 2017).

b. Influence factors

Various individual, interpersonal, and community factors influence the selection and implementation of a curriculum. Our literature search did not yield any sources describing how these factors influence HMRE programs. The influence factors identified here draw upon our own experience implementing HMRE evaluations and evaluations of similar programs, on our conversations with researchers and practitioners, and the descriptions of the federal evaluation participants and surrounding communities. As a result, our discussion of the influence factors is brief, as they are largely theoretical.

Individual and couple characteristics. The composition and needs of individuals and families within a program's area influence whom the program chooses to serve. The composition of racial and ethnic groups in the community, rates of divorce, IPV, and children born to unmarried parents are all examples of factors that may influence the selection of a target population and, ultimately, curriculum or facilitator selection. For example, some programs in BSF and SHM used prevalence statistics of births from single mothers to justify the creation of their HMRE program, with the goal of reducing those births by encouraging marriage. Also, some programs across the evaluations had large communities of Spanish-speaking couples and needed bilingual facilitators and a translated curriculum.

Community context. Community contextual factors may play a role in finding potential facilitators. Factors such as unemployment rate may affect a program's access to a pool of qualified facilitators and supervisors. For example, it may be easier to find facilitators if the unemployment rate is higher, as more people need jobs. Alternatively, the composition of the community may influence the type of facilitators a program can find. For example, El Paso, Texas, the location of the HOME program, had a large proportion of bilingual speakers, which helped in hiring facilitators (and other staff) who were bilingual (Zaveri and Baumgartner 2016).

Policy context. Funding for HMRE research ultimately influences the quantity and quality of the evidence base for HMRE curricula, which, in turn, affects the library of curricula available to HMRE programs. Broad dissemination efforts from funders and from researchers and practitioners influence HMRE programs' awareness of best practices related to facilitator hiring, training, and supervising. This may include guidance from OFA in the form of information memoranda or other written resources for the current grantees.

Model 2: Maximizing participation

Intervention research suggests that greater participation in an intervention—defined as the proportion of planned sessions attended—is associated with better outcomes. For example, a central tenet of group psychotherapy is that people who regularly attend group therapy sessions will have better outcomes than those who miss sessions, because of higher dosage or hours of participation (Yalom and Leszcz 2005). Similarly, adult learning theory posits that skill retention and knowledge gains occur through repetition and experience (Courtney 2018). For HMRE, participants who attend more consistently will be exposed to more key program content and will have more opportunities to practice and hone the skills to solidify their understanding of the content (Bradford et al. 2017).

Participation in HMRE has historically been low (McAllister et al. 2013), and research related to participation is minimal (when compared to research on the program outcomes or impacts) and with inconsistent findings. For example, the BSF researchers employed a quasi-experimental design to compare couples who attended at least one session of the curriculum and couples who attended at least half of the curriculum sessions to matched participants from the control group. This analysis was conducted for the 15-month and 36-month outcomes and did not find differences between these two groups among any outcomes at either time point; this suggests that participation alone did not explain the pattern of impacts (Wood et al. 2011; Moore et al. 2012). Although a few nonrigorous studies outside of the federal evaluations suggest that greater participation is associated with better outcomes (Arnold and Beelman 2018; Bradford et al. 2017; Cobb and Sullivan 2015), research on the HMRE dose–response relationship is limited.

A comparison of results from BSF and SHM suggests that participation may influence outcomes, particularly long-term outcomes.

A comparison of results from BSF and SHM also suggests that participation may influence outcomes, particularly long-term outcomes. Both evaluations found some modest impacts in short-term couple functioning outcomes (Hsueh et al. 2012; Wood et al. 2010). However, only SHM found significant long-term impacts on some couple functioning outcomes (Lundquist et al. 2014; Wood et al. 2012). A comparison of participation rates shows large differences between the evaluations. Only 55 percent of couples attended one or more sessions in BSF (Dion et al. 2010), compared with 83 percent in SHM (Gaubert et al. 2012), and this may be due to a range of factors, including the different populations targeted by BSF (unmarried couples) and SHM (married couples). Some have

suggested that the low participation rate contributed to the lack of long-term findings in BSF (Hawkins and Erickson 2015; Wood et al. 2012). Compared to BSF, PACT also had higher participation, but this evaluation lacked a long-term follow-up assessment (Zaveri and Baumgartner 2016).

Hypothesis

Increased participation in HMRE curriculum workshops may improve couple functioning outcomes. By selecting and implementing retention and barrier reduction plans that include: (1) case management services, (2) participation supports (incentives, child care, transportation, etc.), and (3) flexible workshop scheduling, programs may increase participation, which leads to better couple functioning outcomes. Staff implementing the retention and barrier-reduction plan may also consider building staff–participant relationships/rapport and relationships between other participants as a means for increasing participation.

HMRE programs implement a variety of activities to promote participation and address barriers participants may face that limit participation (Bradford et al. 2014; Busby et al. 2015; Carlson et al. 2014; Cobb and Sullivan 2015; McAllister et al. 2013). Couples, especially low-income couples, face practical barriers—lack of reliable child care or transportation, for example—that prevent them from participating. The programs in the federal evaluations addressed these barriers by providing case management, participation supports, and flexible workshop scheduling.

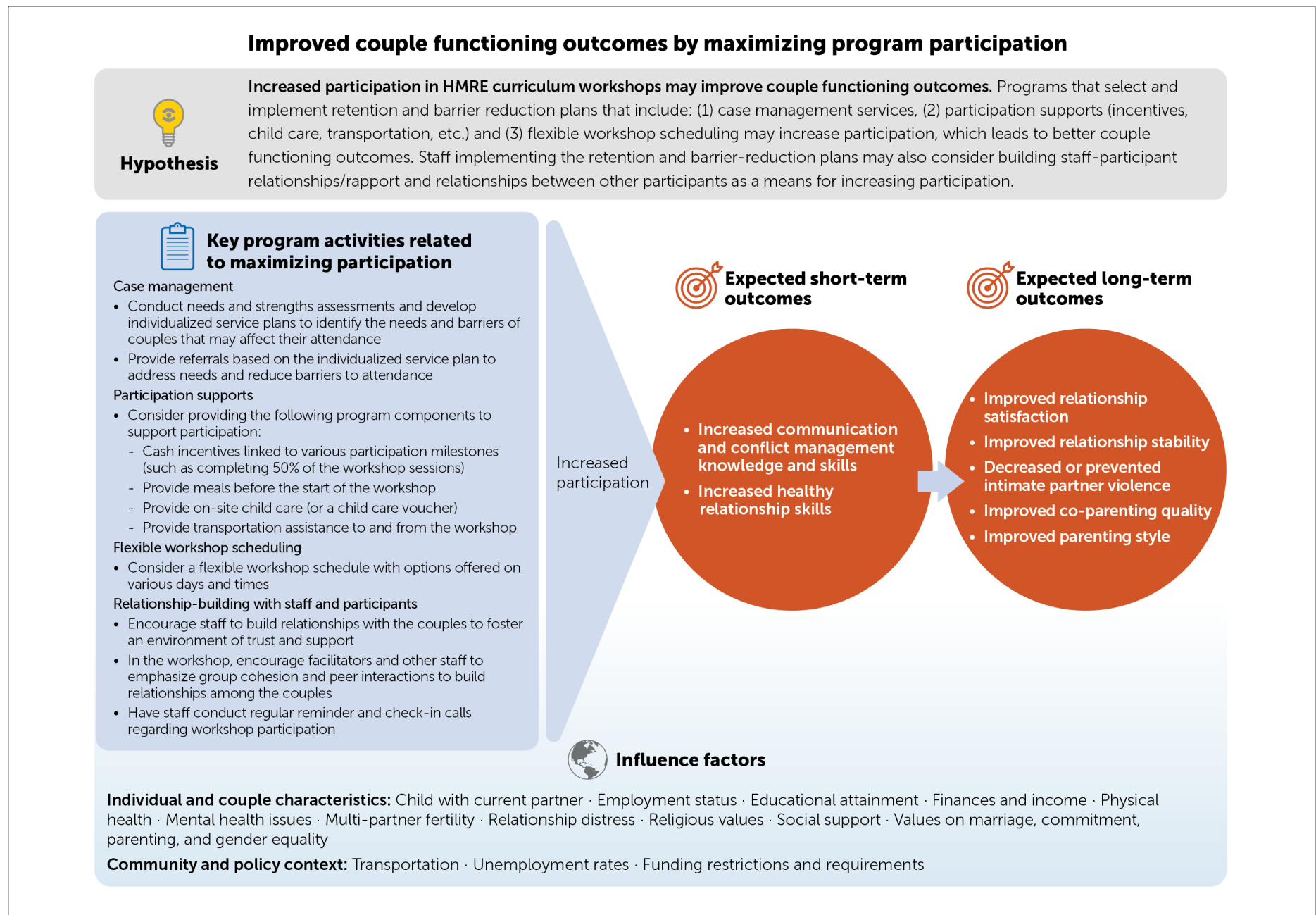
Additionally, the programs emphasized building relationships between staff and couples as well as among the couples, in part to encourage ongoing participation.

a. Key program activities

HMRE programs may want to consider implementing several activities to increase participation by reducing barriers and facilitating or encouraging attendance.

Case management may increase participation through reducing barriers. Programs conduct a range of case management activities, although our literature review found limited information on the best practices or effectiveness of case management strategies in HMRE programs. All the programs in the federal evaluations employed some form of case management, as did many programs reviewed in SFER (Avellar et al. 2012).

Figure IV.2. **Maximizing participation**



In general, the HMRE case managers aimed to conduct needs and strengths assessments to identify any barriers to participation and form an individualized service plan. Case managers used this information to provide participation supports (for example, transportation assistance) and referrals to community agencies to address any identified barriers. Common referrals included utility, food, housing, or cash assistance; mental health services; substance abuse treatment; employment and education services; and IPV services. Several reviewed sources stated that some couples may need additional supports to attend HMRE programs (Baucom et al. 2017; Bradford et al. 2014, 2015; McGill et al. 2016), such as home visits (Carlson et al. 2017).

All programs in the federal evaluations and most programs reviewed in SFER offered a variety of participant supports.

Participation supports may increase participation. Although we could not confirm their efficacy through the literature, all programs in the federal evaluations and most programs reviewed in SFER offered a variety of participant supports. Programs provided child care or child care reimbursement and meals as on-site incentives. Programs also provided transportation supports, such as vouchers for public transportation or taxis, gas cards, or being picked up and driven to group sessions by program staff. Programs also provided cash incentives linked to program milestones (for example, attending 50 percent of the workshop sessions). SHM reported that couples received participant supports worth \$567 on average, with cash incentives making up a large portion of that amount (42 percent; Gaubert et al. 2012). In some programs, case managers had the authority to provide small amounts (for example, \$100 or less) of emergency cash assistance to couples in need.

In multiple studies, participants often reported that the participation supports encouraged and facilitated their participation. Couples participating in focus groups in both PACT and BSF described the utility of the participation supports (Dion et al. 2010; Zaveri and Baumgartner 2016). Many said that initial cash incentives linked to enrollment and attending the first curriculum session encouraged enrollment and initial engagement. Other couples felt that the on-site incentives (for example, child care) helped them to attend consistently. A qualitative study echoed these findings (Roberts et al. 2018).

Flexible workshop scheduling may help encourage participation.

Across the federal evaluations, some programs offered a variety of workshop schedules. For example, some programs offered workshops on weekday

mornings, nights, or weekends. One program in PACT and SHM held two-hour weekly workshops for two months, but also offered a condensed version with longer sessions over just three or four weeks (Gaubert et al. 2012; Zaveri and Baumgartner 2016). This schedule enabled couples to join a workshop soon after enrolling into the program that fit their schedule. However, the effectiveness of this approach has not been rigorously evaluated.

Relationships with peers and with staff may increase

participation. Two of the bullets in the “key program activities” section of the model state that programs should make an effort to not only build relationships between participants and program staff, but also foster peer interactions and group cohesion among the participants themselves. Although these two types of relationships seem to be important, neither was rigorously examined in the literature we reviewed. Program staff in the federal evaluations, usually case managers, maintained regular contact with the couples, starting at the recruitment/enrollment phase and continuing throughout the program (Dion et al. 2010; Gaubert et al. 2012; Zaveri and Baumgartner 2016). This contact included regular reminder calls for upcoming workshop sessions or appointments and follow-ups on missed sessions to assess barriers and schedule or provide make-ups. This communication aimed to help staff understand the couples’ goals and needs and establish trust. Additionally, many facilitators often socialized or dined with participants before the start of each HMRE session.

A few studies stressed the importance of the facilitator–participant relationship. Two studies found that a strong alliance (the degree to which the participants and facilitators bond and understand/trust each other) was associated with better relationship quality and conflict management skills among couples than that achieved with poor facilitator–participant alliances (Ketring et al. 2017; Quirk et al. 2014). Another study theorized that rapport building between facilitators and participants could reduce the stigma and nervousness associated with HMRE participation, particularly among men, and influence attendance (Carlson et al. 2014).

The group-based nature of HMRE is thought to make the curriculum more interactive, normalize the challenges couples face, and encourage the formation of peer relationships (Kivlighan et al. 2017; Wadsworth and Markman 2012). Focus groups in PACT and BSF supported this notion, stating that the HMRE groups helped them build friendships and socialize (Dion et al. 2010;

Zaveri and Baumgartner 2016). The peer relationships may also capitalize on principles of altruism or social pressure to attend. For example, one HMRE study found that a group member's level of need (for example, psychological or relationship distress) significantly affected the attendance of the group as a whole. In particular, groups with participants with higher needs (for example, more relationship distress) than the other groups, on average, had better attendance (Kivlighan et al. 2017). The authors attributed this finding to participants showing up to help and support those with higher needs.

b. Influence factors

This section outlines several factors that may influence participation. We identified these through our review of the federal evaluations and the descriptions of their participants and communities. Our literature search identified few studies discussing these factors.

Individual and couple characteristics. Many individual characteristics may influence the ability to participate. Unemployment, underemployment, and having a low income could influence a participant's ability to obtain reliable transportation, pay for child care, or have a consistent work schedule (Carlson et al. 2017). These challenges may make it more difficult to attend workshops regularly. Poor health can also impede the ability to participate, as medical issues can also affect employment, income, and the physical ability to leave one's residence and participate. Arnold and Beelman (2018) argued that economic hardship and psychological distress affect both the couple and their ability to participate reliably in HMRE. Higher education, more religiosity, and highly valuing marriage have all been associated with completing an HMRE program (Busby et al. 2015).

Family composition or number of children within the home and the availability of social support can influence participation. Having multiple children of varying ages (for example, a newborn and a toddler) may make it difficult to find child care, given the varying developmental needs of the children or increased cost. Additionally, lack of a social or family network might make it more difficult to find child care or obtain other resources that could help with attendance (for example, borrowing a family member's car).

The couple's relationship characteristics may also influence participation. Busby and colleagues (2015) theorized that a couple's strong commitment to one

another or their perception of risk in their relationship may influence participation in HMRE. They stated that a strong commitment or an increased sense of relationship dissolution or divorce may encourage a couple to attend regularly.

Community context. Several community-level contextual factors may also be important to consider. High unemployment rates make it more difficult to find or keep a job, reducing economic stability and thus affecting a couple's ability to attend. The state of public transportation also influences the ability to attend. For example, participants who lack reliable private transportation need an appropriate public transportation option or participation supports related to transportation (for example, taxi vouchers) to attend HMRE programs.

Policy context. Broader organizational or public policy contextual factors may also influence programs' ability to provide participation supports. HMRE federal funding may restrict the amount and type of participation supports and incentives the programs can offer; for example, HMRE funding cannot directly pay for couples or family therapy.

Model 3: Addressing factors related to couple and individual characteristics

HMRE programs might be more or less effective depending on participants' individual or couple characteristics. Both BSF and SHM found that several baseline characteristics were associated with outcomes. These studies found the following effects:

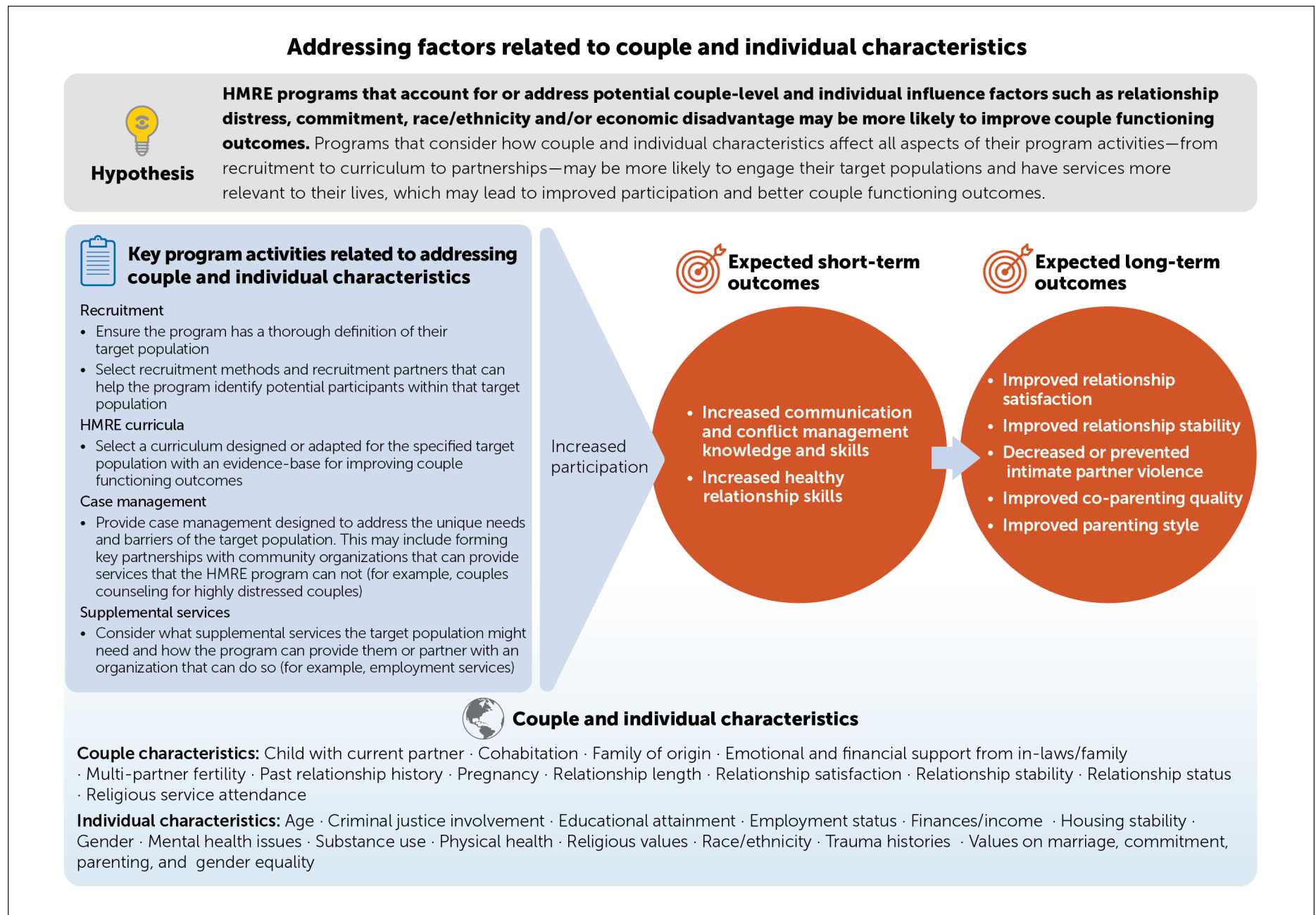
- BSF found significantly different impacts in African American couples. When compared to unmarried couples in other racial and ethnic groups, unmarried African American couples had greater impacts on short-term couple functioning outcomes (Wood et al. 2010). Similarly, SHM also found significantly different impacts for Hispanic couples. When compared with married couples in other racial and ethnic groups, married Hispanic couples had significantly greater impacts on short-term couple functioning outcomes (Hsueh et al. 2012). However, neither finding was sustained in long-term follow-ups (Lundquist et al. 2014; Wood et al. 2012). None of the peer-reviewed literature we reviewed found race or ethnicity to be a potential moderator, although some suggest more research is needed to understand how race and ethnicity may influence outcomes (Wadsworth and Markman 2012).

- The programs studied in SHM, which served only married couples, had larger effects on couple functioning outcomes for couples with higher initial levels of distress than couples experiencing less distress (Hsueh et al. 2012; Lundquist et al. 2014). Most of the studies we reviewed of HMRE programs serving both married and unmarried couples had similar findings to SHM (Bradford et al. 2017; Carlson et al. 2017; Hawkins and Erickson 2015; Ketring et al. 2017; McGill et al. 2016; Quirk et al. 2014; Visvanathan et al. 2015; Williamson et al. 2015).
- PACT did not find statistically significant impacts on couple functioning for any of the subgroups of couples examined (Moore et al. 2018). Though the difference was not statistically significant, married couples showed larger effects than unmarried couples. This pattern is also suggested by comparing results from the BSF and SHM evaluations. Programs examined in the two evaluations offered similar services. However, BSF, which served unmarried couples, did not have long-term effects, whereas SHM, which served married couples, had favorable long-term effects on some measures of couple functioning. Some have hypothesized that marital status may indicate lower levels of relationship distress and poverty and higher levels of commitment (Amato 2014; Edin and Kefalas 2005; Hawkins and Erickson 2015; McLanahan and Beck 2010). Commitment and the value each partner places on their relationship might affect couple functioning. Some researchers posit that HMRE may be more effective for more committed couples who place a high value on their relationship than for those who are less committed or do not place a high value on their relationship (Busby et al. 2015; Hawkins and Erickson 2015; Owen et al. 2013; Scott et al. 2013).

Hypothesis

HMRE programs that account for or address potential couple-level and individual influence factors such as relationship distress, commitment, race/ethnicity and/or economic disadvantage may be more likely to improve couple functioning outcomes. Programs that consider how couple and individual characteristics affect all aspects of their program activities—from recruitment to curriculum to partnerships—may be more likely to engage their target populations and have services more relevant to their lives, which may lead to improved participation and better couple functioning outcomes.

Figure IV.3. Addressing factors related to couple and individual characteristics



Socioeconomic status may play a role in moderating HMRE outcomes (Amato 2014; Baucom et al. 2017; Hawkins and Erickson 2015; Johnson 2012). Although income was not a significant moderator in the federal evaluations, researchers have observed that low-income couples have more complex lives with more immediate needs than do higher-income couples (Dyk 2004; Edin 2000) As a result, these couples may be less able to attend HMRE regularly or solidify the knowledge and skills delivered through the curriculum. Recent meta-analyses noted that effect sizes were smaller for the studies involving low-income couples than for middle- to high-income couples (Arnold and Beelman 2018; Hawkins and Erickson 2015). However, this conclusion is not universal; some studies have found larger effects for disadvantaged, at-risk participants (Amato 2014; Rauer et al. 2014; Stanley et al. 2014; Williamson et al. 2014). Some argue that these discrepant findings warrant further consideration of the effect socioeconomic status plays (Wadsworth and Markman 2012).

a. Key program activities

This model suggests that programs consider the characteristics of the couples participating in their programs and tailor their programs to those couples. As a result, the key program activities discussed below represent a broad range of topics for programs to consider when designing and implementing their services.

Defining a target population. A well-defined target population can help program staff recruit participants and choose a curriculum (Metz and Louison 2018). All programs in BSF and SHM went through an intensive pilot phase, which included defining their target populations (Dion et al. 2006; Gaubert et al. 2010). An understanding of what influence factors or needs may be at work within their selected target population (for example, high rates of poverty or cultural considerations based on race, ethnicity, or religion) can help programs craft their services to meet the needs of the people they serve and approach them to enroll in services.

Tailoring recruitment methods for the target population. Program staff in BSF and SHM used the planning period to identify potential recruitment methods. Across the three evaluations, program recruiters reported tailoring their recruitment methods (for example, modifying the type of recruitment messages delivered to different participants or couples) to the specific needs of the potential participants (Dion et al. 2010; Gaubert et al. 2012; Zaveri

and Baumgartner 2016). We identified several studies that supported the crafting of recruitment methods based on the needs and demographics of the target population (Bradford et al. 2014; Carlson et al. 2014; Roberts et al. 2018). For example, one study found that low-income couples felt more stigma (for example, feelings of shame associated with potential participation) about participating and needed more reassurance from program staff to help assuage their concerns before enrolling than did higher-income couples (Carlson et al. 2014).

Multiple activities in the model rely on successful partnerships.

Establishing key partnerships. By understanding the characteristics and needs of the program's target population, HMRE program leadership can identify appropriate community partners. Multiple activities in the model rely on successful partnerships. Community partners are essential for recruitment and other program activities such as serving as referral organizations for case managers or providers of supplemental services.

Programs in the federal evaluations and the reviewed literature (Bradford et al. 2014; Futris 2017; Roberts et al. 2018) worked to develop key partnerships to recruit and serve their couples. For example, some programs partnered with hospitals and medical institutions to recruit eligible couples (for instance, expecting couples). For many programs, partnerships with employment or social service providers served as referral sources for the HMRE program's case managers. One study mentioned partnering with faith-based communities to convey to participants that the HMRE program is working with a trusted organization (Roberts et al. 2018), which may be important when working with underserved communities.

Some researchers have suggested that HMRE programs work with a coalition of community agencies. Working with multiple agencies can help HMRE program staff identify the needs and strengths of the community and leverage those strengths to meet participants' needs (Baucom et al. 2017; Bradford et al. 2014; Futris 2017). Partners may also provide supplemental services that HMRE programs cannot offer due to funding restrictions (discussed further in the next section).

Tailoring program services to participants. Tailoring a program involves selecting and adapting the HMRE curriculum, case management services, and any other supplemental services to the target population.

Selecting services that are relevant to the participants' lives and address their needs could increase participation. For example, findings from BSF and SHM indicated that programs may need additional services to improve participants' employment and economic well-being. Programs in PACT added employment and economic stability services to their programs based on the requirements of the grant funding announcement by OFA (Zaveri and Baumgartner 2016). This change included additional employment-related workshops and case management services.

Some researchers recommend a more customized approach for couples enrolling in HMRE, moving away from a "one size fits all" approach and using assessments to provide tiers or types of service based on participant characteristics (Bradford et al. 2015; Busby et al. 2015; Kanter and Schramm 2017; McAllister et al. 2013). For example, several researchers suggest assessing the level of relationship distress before services begin. On the basis of this assessment, program staff could assign couples to three types of services:

1. **Self-directed or "light touch" HMRE workshop.** Couples with low levels of distress could be placed in a self-directed (or online) or "light touch" HMRE workshop that can be completed at the discretion of the couple or at reduced intensity (for example, two-hour sessions monthly for several months). One study suggested that couples with low levels of distress may have more skills and resources than couples with more distress and could be triaged to and benefit from these less intensive services (McAllister et al. 2013). This would leave more resources to serve couples with higher needs.
2. **Traditional HMRE workshop.** Couples with moderate to high levels of distress could take part in a traditional HMRE workshop as described in Model 1 (Busby et al. 2015). As described above, these couples have positive outcomes associated with this traditional format.
3. **Therapy coupled with an HMRE workshop.** Couples with high levels of severe distress could be placed in a combination program, participating in therapy and HMRE (Bradford et al. 2015). One study suggested that a therapy session before or after an HMRE workshop could help couples establish goals or boundaries, process and reinforce the content from the workshop, or provide additional assistance with any individual or family issues (Bradford et al. 2015). Although funding restrictions prevent federally funded HMRE programs from providing

therapy directly, programs might be able to form strategic partnerships with community organizations to provide these supplemental services.

Case management services could also be tiered to address the varying needs of couples. As discussed in the second model, programs could provide more intensive case-management services, such as home visits, to more disadvantaged couples (Carlson et al. 2017).

b. Influence factors: Individual and couple characteristics

The influence factors are possible individual and couple characteristics moderating HMRE outcomes, which programs should consider for defining their target population. We specified the influence factors included in the model through our review of the federal evaluation literature and the descriptions of their participants and communities, as well as through the literature described in this section.

As summarized above, multiple research studies have identified relationship factors—such as relationship distress, relationship status, infidelity, cohabitation, relationship length, and relationship history—that could play a role in the effectiveness of HMRE. The research we summarized above also identified several other interpersonal factors that may be salient, including social support from family and friends, multi-partner fertility, and participation in religious services. Although BSF and SHM analyzed some of these characteristics and found no significant associations with the effectiveness of the program, some researchers have still called for further investigation into these potential moderators (Hawkins et al. 2015; Wadsworth and Markman 2012).

Individual characteristics, such as race and ethnicity, may also be important to examine, as some impacts differed between various racial and ethnic groups (Hsueh et al. 2012; Wood et al. 2010). Although the evidence is not conclusive as these differences have not been sustained in long-term analyses, race and ethnicity are important factors for programs to consider. Culture plays an important role in defining values related to relationships (Harknett and McLanahan 2004; Raley et al. 2015) and perceptions about help-seeking behavior (Shim et al. 2009). Additionally, members of racial and ethnic groups (along with other marginalized groups) may have a mistrust in researchers or practitioners, fear of authority, and concerns regarding exploitation and/or mistreatment that programs will need to overcome (Bonevski et al. 2014).

The reviewed programs and other HMRE literature also show some differential effects for men and women. For example, some programs in SHM had long-term effects on women's avoidance of negative conflict management skills, but not men's (Hsueh et al. 2012). Although the issue was not discussed in the reviewed literature, we hypothesized that other individual characteristics may moderate the effects of the programs—for example, criminal justice involvement, trauma history, age, and mental health. As with interpersonal factors, the federal evaluations examined some of these factors and did not find significant variation in impacts. However, others suggest that more research is needed on how these individual characteristics moderate outcomes (Hawkins et al. 2015; Wadsworth and Markman 2012).

V. CONCLUSIONS AND NEXT STEPS

Using HMRE federal evaluation reports, peer-reviewed literature, and input from HMRE researchers and practitioners, we created the HMRE Pathways-to-Outcomes models described in this report to explore hypothesized links between program activities and intended outcomes for adult couples. Each model shares common elements, including influence factors and program activities, which may work together to affect short- and long-term outcomes.

The three models coalesce so that the programs are built around the needs of the participants, which enhances their participation in and benefits from services.

Ideally, the three models coalesce so that the programs are built around the needs of the participants, which enhances their participation in and benefits from services. We hypothesize that, ultimately, the delivery of the curriculum combined with participation and dosage affect the magnitude of the outcomes, as moderated by select influence factors. Long-term outcomes may depend particularly on participants' completion of most or all of the curriculum's intended sessions, thus their exposure to most or all of the intended content. Influence factors may also continue to affect long-term outcomes.

The three models presented in this report are research-informed hypotheses, but they have not yet been tested. Moreover, these models are not comprehensive. Additional factors might be critical to achieve effective programs. Given this, these models point to the need for additional research. Future research may address:

1. **Facilitators and facilitator management.** Although our review found many facilitator characteristics that may influence the success of participation, we found little research that rigorously examined facilitator characteristics and demographics. Similarly, the literature in our review indicated the importance of training and fidelity monitoring, but we found little guidance on best practices. Future research could examine what makes an HMRE facilitator effective.
2. **Staff-participant relationships and group dynamics.** Our review found that many HMRE programs stress the importance of relationships with HMRE staff and peers in the HMRE workshops, but we found few studies that tested these assumptions. Future research could focus on how best to form staff-participant relationships and encourage peers within a workshop to form relationships. Additionally, this work could examine how these relationships encourage participation.

3. **Case management and participation supports.** We found extensive documentation of case management strategies and participation supports, but little evidence to support their efficacy in increasing participation. Future work could more rigorously examine the varying strategies and determine their efficacy in reducing barriers and encouraging participation.
4. **Influence factors.** The research we reviewed presented a mix of individual-, couple-, community-, and policy-level influence factors that may moderate outcomes. However, our review does not find a consensus on for whom HMRE works best and in what situations; this could be explored in future research.
5. **Long-term outcomes.** Throughout our review, we found—and many authors noted—a lack of rigorous research examining long-term outcomes. Future long-term research will be important in testing whether and how short-term outcomes, such as conflict management and relationship skill gains, are linked to long-term changes in couple functioning.

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APPENDIX A

LITERATURE SEARCH STRATEGY AND RESULTS

LITERATURE SEARCH STRATEGIES AND RESULTS

To supplement our review of the federal evaluation documents, we conducted targeted literature searches. We began our searches by identifying existing publications to serve as anchor reviews. We identified four sources that summarized the relevant literature: The Strengthening Families Evidence Review (Avellar et al. 2012) and three meta-analyses (Arnold and Beelmann 2018, Hawkins et al. 2008, Hawkins and Erickson 2015).

To supplement these sources, we conducted a targeted scan of the peer-reviewed and gray literature. The literature scan included several searches developed to further our understanding of key program activities and influence factors and how they may be linked to outcomes. Table A.1 shows the research questions and search terms for each search.

We searched five databases for relevant literature: PsycINFO, ERIC, Education Research Complete, SocIndex, and the Dissertation Database. We also searched the National Resource Center for Healthy Marriage and Families website. Our searches were limited to English-language publications from the past five years, released no earlier than 2013.

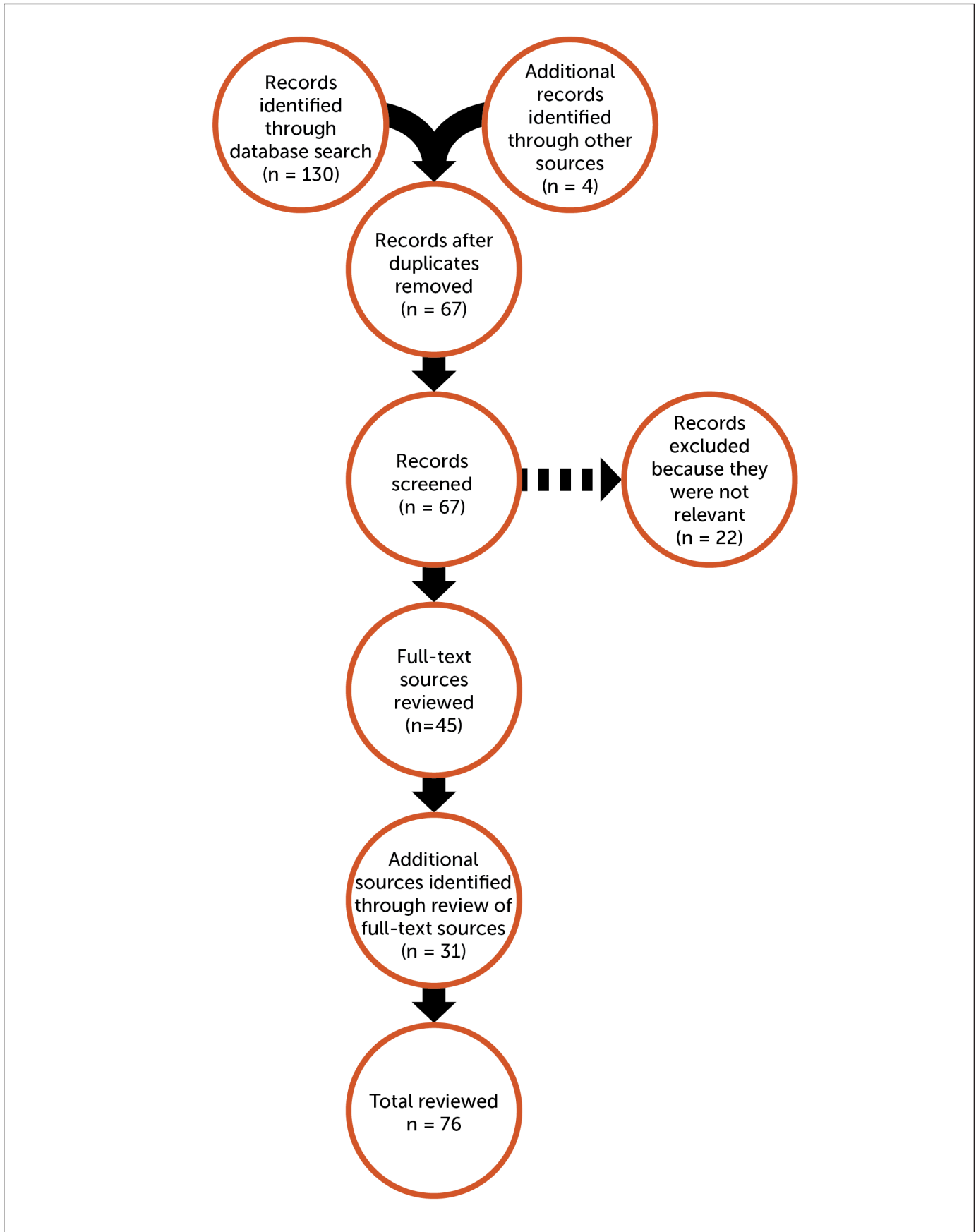
Figure A.1 presents a flow diagram of the literature search. The searches identified 134 results across our research questions shown in Table A.1. We removed 67 duplicate sources across the databases. After reviewing the titles and abstracts of these 67 articles, we excluded 22 sources that were not relevant to this project. We reviewed the remaining 45 articles and extracted the relevant information. Through our review, we identified an additional 31 sources relevant to the project that were mentioned in the text or references of the 45 initial articles. Thus, we reviewed 76 sources to inform the development of the hypotheses and models. The references section of this memo provides a full list of the sources.

We reviewed 76 sources to inform the development of the hypotheses and models.

Table A.1. Research questions and associated search terms used

Hypothesis	Research question	Key words
Model 1	What facilitator characteristics or qualities are associated with effective HMRE facilitation? How do supervision and coaching support effective HMRE facilitation?	Facilitation, facilitators, educators and Characteristics, qualities, training, supervision, coaching and Couples relationship education, healthy marriage education, healthy relationship education, healthy marriage and relationship education, marriage and relationship education, couple and relationship education, marriage education, couple education, relationship education
	How does curriculum fidelity influence HMRE outcomes?	Fidelity, integrity, adaptations, continuous quality improvement and Couples relationship education, healthy marriage education, healthy relationship education, healthy marriage and relationship education, marriage and relationship education, couple and relationship education, marriage education, couple education, relationship education
Model 2	What barriers to HMRE participation exist? How effective are participation support and barrier reduction services at increasing HMRE participation?	Barrier, barrier reduction, incentives, case management, rapport, staff relationships, peer relationships, therapeutic alliance and Participation, dosage, retention, attendance and Couples relationship education, healthy marriage education, healthy relationship education, healthy marriage and relationship education, marriage and relationship education, couple and relationship education, marriage education, couple education, relationship education
	How does increased participation influence HMRE outcomes?	Participation, dosage, retention, attendance and Couples relationship education, healthy marriage education, healthy relationship education, healthy marriage and relationship education, marriage and relationship education, couple and relationship education, marriage education, couple education, relationship education
Model 3	How do the characteristics of the couple at enrollment influence HMRE outcomes?	Characteristics, demographics, traits, needs, low-income, unmarried and Couples relationship education, healthy marriage education, healthy relationship education, healthy marriage and relationship education, marriage and relationship education, couple and relationship education, marriage education, couple education, relationship education

Figure A.1. Overall search results diagram for all research questions



ENDNOTES

¹ The HMRE programs also serve adult individuals and youth; this report focuses on programs serving adult couples.

² A longer-term hypothesis that we do not address in this report is that, ultimately, it is hoped that HMRE programs result in improved outcomes for children, by way of parents' improved relationships.

³ We also incorporated feedback from the Office Planning, Research, and Evaluation (OPRE) and OFA throughout the development process.

⁴ Many programs in the federal evaluations, but not included in this report, also had these attributes, but they may or may not have produced impacts. For example, although a program conducts certain activities, these activities may not be well implemented, which may lead to the lack of impacts.

⁵ This is discussed more in the second hypothesis.

