



Moving Beyond Depression™

**An Effective Program to
Treat Maternal Depression
in Home Visiting:
Opportunities for
States**

Moving Beyond Depression is a
program of Every Child Succeeds



EVERY CHILD
SUCCEEDS®

*Preparing new mothers and their children
for healthy, successful lives.*

Acknowledgments

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This report has content on programs and policy, as well as recommendations for action. Any errors of fact or emphasis are responsibility of the authors.

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Introduction

Depression is prevalent among new mothers, particularly among low-income women. High rates of maternal depression (including prenatal and postpartum conditions) have been found among the populations served by home visiting programs. For example studies suggest that half of low-income women in home visiting, Early Head Start, and other public programs report depressive symptoms. For women living in poverty and women of color, depression often goes untreated.

While depression is prevalent among mothers in home visiting programs, these programs alone are insufficient to bring about substantial improvement in depression for individuals and populations served. Furthermore, studies show that depression can lessen or constrain the potential positive effects of home visiting services.

This brief highlights the *Moving Beyond Depression™* program and its effective, new approach to treating maternal depression. Using In-Home Cognitive Behavioral Therapy (IH-CBT), *Moving Beyond Depression* offers treatment for depressed mothers, provided alongside a home visiting program. The approach seeks to: a) optimize engagement and impact through delivery of treatment in the home setting; b) focus on issues important to young, low-income mothers; and c) build a strong collaborative relationship between therapists and home visitors to enhance the effectiveness of both approaches.

Recent research on *Moving Beyond Depression* demonstrates the potential for using IH-CBT to augment what evidence-based home visiting models offer families and significantly improve outcomes. States have opportunities to add this evidence-based, maternal depression treatment program to their home visiting programs and systems. Using MIECHV, Medicaid, health reform and other policy options, states can add evidence-based treatment capacity to reduce, not just screen for, maternal depression among high risk new mothers.



The Challenge of Maternal Depression

The prevalence of major depressive disorders (MDD) among pregnant women and new mothers postpartum has been estimated to be approximately 13-14 percent in the United States. Studies suggest that the prevalence of depression during pregnancy and postpartum are equally high, and this paper discusses these two time periods together as maternal depression.^{1, 2, 3, 4} Low-income women have higher rates of maternal depression—with estimates of 25 to 28 percent.^{5, 6} In populations served by home visiting programs, the estimated prevalence is of maternal depression ranges from 28 to 61 percent.^{7, 8, 9, 10, 11, 12, 13} Universal screening, as recommended by many national entities, would likely find higher prevalence rates.¹⁴

Low self-esteem, inadequate social support, and elevated stress are all associated with and can be thought of as predictors and contributing factors for maternal depression.^{15, 16, 17} Adverse childhood experiences (ACE) of the mother herself as a child—such as abuse and neglect, trauma, and exposure to violence—are strongly associated with a risk of maternal depression. Past or current intimate partner violence also are precursors of depression.^{18, 19, 20, 21} In addition to poverty, demographic factors such as low educational attainment, unmarried status, and African American race/ethnicity are associated with higher rates of maternal depression.^{22, 23, 24, 25}

Depression results in functional impairment for these women, with impact on their home, parenting, work, and social relationships. The negative

Table 1. The Impact of Maternal Depression on Women, Children, and Families

Impact on birth outcomes	Impact on child's health and behavior	Impact on parenting	Impact across life span for depressed adult	Impact on family
3.4 times more likely to have a premature delivery	More likely to have attention deficits	Less satisfied in their parenting role	Average 6 fewer years of education	Partners of depressed mothers often experience unhappiness and dissatisfaction
4 times more likely to deliver a low birth weight baby	Trouble regulating emotions and behavior	More irritable in parenting	Less likelihood of marrying	Family members often lose the support of depressed mothers and experience an increase in stress
More likely to have obstetrical complications	More likely to have conduct problems	More likely to use harsh management techniques	Average annual loss of income of \$10,400 by age 50	Families with a depressed parent experience lifetime income loss of \$300,000
Less likely to breast-feed, or to breastfeed as long	Less use of preventive health visits and preventive devices such as car seats	More likely to have negative views of their children	35% reduction of lifetime income due to depression	
	More likely to be delayed in language and literacy or to have lower IQs	More fatigued and have less energy for parenting		

Sources: March of Dimes, 2013; National Business Group on Health, 2011; Smith & Smith, 2010.

symptoms of depression include mood problems, sleep disturbance, fatigue, poor concentration, problems with weight loss or gain, and thoughts about death. Depression impinges on all aspects of the parenting role which in turn are also targets of home visiting. Relative to their non-depressed counterparts, depressed mothers have been found to be disengaged from their children, unable to modulate affect or behavior during mother-child interactions, insensitive to child cues regarding needs and emotional states, more negative and less positive during interactions, and talk less to their children.^{26,27,28,29} Depressed mothers read less to their children, are less attentive to health and prevention needs, and less likely to engage in functional and symbolic play.^{30,31} Table 1 shows some of the impacts over the life span.

Beyond its effects on women, maternal depression can have serious negative impact on the health, development, and well-being of young children.^{32,33,34}

Maternal depression threatens two core parental functions: fostering healthy relationships to promote development and carrying out the management functions of parenting (e.g., scheduling, supervising, using preventive practices).^{35,36,37} For example, the infants and young children of depressed mothers are less likely to be breastfed, read to, talked to, receive well child visits, or ride in car seats.^{38,39,40} Perhaps more serious consequences come from the greater likelihood of experiencing harsh child discipline approaches, negative interactions, disengagement, or emotional neglect.^{41,42} As a result, the young children of depressed mothers are more likely to have delays in development or problems with behavior.^{43,44,45} In addition, when maternal depression co-exists with other adversities and stressors such as poverty, violence, and substance abuse, the multiple risks to effective parenting have a compounding, cumulative impact on child development. Identifying and treating maternal depression is critical for avoiding

adverse developmental outcomes and life course trajectories for children.

Multiple barriers impede access to community-based treatment of maternal depression, particularly for low-income women. Lack of health coverage, particularly when coverage ends 60 days after a Medicaid financed birth, creates financial barriers for many new mothers. Even for those with Medicaid coverage, the supply of providers accepting Medicaid is limited. Women also face logistical and geographic access barriers such as finding a local mental health professional, scheduling appointments around work or parenting responsibilities, and securing transportation to visits.⁴⁶ The likelihood even of enrollment and engagement in home visiting varies by maternal factors such as education, depression, and perceived need.^{47,48,49,50} In addition, while antidepressant medication is a widely used and effective treatment for depression in general, studies suggest that these medications may concentrate in breast milk or otherwise not be appropriate given the physiological status of new mothers. Antidepressant medication also may not be as effective among women with ACEs and prior trauma experiences.^{51,52,53}

The expansion of home visiting through the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) program, as enacted under the Affordable Care Act, has increased the potential for positive impact on rates of maternal depression through home-based interventions.^{54,55,56} Yet not all home visiting programs and home visitors have the skills to identify clinical depression, and too few communities have resources to provide clinical treatment. Research indicates that home visiting may be insufficient to ameliorate maternal depression.^{57,58,59,60} If left unaddressed, however, depression can undermine the effectiveness of home visiting.

Every Child Succeeds® (ECS) a division of Cincinnati Children's Hospital Medical Center, is a nationally recognized home visiting program serving Greater Cincinnati and Northern Kentucky. (See box.) Building on its research capacity, ECS has developed and evaluated an effective method of In-Home Cognitive Behavioral Therapy (IH-CBT) to address maternal depression called *Moving Beyond Depression*. This approach has been evaluated through a research clinical trial and replicated across the country.

Every Child Succeeds®

ECS is a home visiting program whose mission is to ensure a strong start for children by helping families achieve positive health, successful parenting, and optimal child development outcomes. Home visits are offered to families in eight counties in Southwest Ohio and Northern Kentucky. In 1999, ECS was founded by Cincinnati Children's Hospital Medical Center, United Way of Greater Cincinnati, and Cincinnati-Hamilton County Community Action Agency.

The program matches first-time, at-risk mothers with trained professional home visitors who work with them and their young children from pregnancy until the child's third birthday. Visits are provided by nurses, social workers, child development specialists, or other professionals. ECS providers use the Healthy Families America (HFA) and Nurse-Family Partnership (NFP) program models.

ECS practice is grounded in data and research, using a comprehensive ongoing evaluation approach and continuous quality improvement (CQI). ECS has built a state-of-the-art data and information system called e-ECS, which collects data, tracks outcomes, and assures accountability. CQI is built upon lessons learned from corporate leaders and has been enhanced through affiliation with Cincinnati Children's Hospital Medical Center, which is a leader in quality improvement in the health field.

Research projects, conducted by ECS with funding from the National Institutes of Health and others, are demonstrating effective new approaches in home visiting such as *Moving Beyond Depression*.

ECS data document the results.

- The infant mortality rate is 4.7 infant deaths per 1,000 births among ECS families—significantly below 2011 rates for Ohio (7.9) or the City of Cincinnati (14.0). A study showed that infants without home visits were 2.5 times more likely to die in the first year.⁶¹ African-American and white infants in ECS benefited equally.
- 96 percent of ECS children have a medical home and 83% are fully immunized by age two. Only half of the infants and toddlers served by Medicaid in our county receive the recommended number of well-child visits.
- 97 percent of ECS infants are on track with healthy development based on developmental screening.



Research and Results from *Moving Beyond Depression*

Moving Beyond Depression is a comprehensive approach to identifying and treating depression among mothers voluntarily participating in home visiting programs. *Moving Beyond Depression* was developed to address these needs through a specific screening process to identify mothers in need of treatment and evidence-based treatment for depression adapted for home visiting programs and settings.

In-Home Cognitive Behavior Therapy (IH-CBT) is at the core of *Moving Beyond Depression* and was developed specifically to provide treatment of depression in first-time mothers enrolled in home visiting programs. IH-CBT offers treatment that emphasizes the reduction of maternal depressive symptoms and recovery from major depressive disorders (MDD), thereby allowing home visitors to attend to parenting, physical health, child development, and other prevention issues. The IH-CBT approach adapts evidence-based and time-tested methods from Cognitive Behavior Therapy (CBT),⁶¹ adding specialized features designed to meet the needs of new mothers and to integrate seamlessly with ongoing home visiting services.

Specifically designed to address the needs of low-income mothers participating in home visiting programs, research on *Moving Beyond Depression* has demonstrated success. A new evidence-based approach is available.

Findings from a series of studies, including a randomized clinical trial funded by the National Institute of Mental Health, indicate that IH-CBT as implemented through *Moving Beyond Depression* is an efficacious treatment for depressed mothers in home visitation programs. It has been shown to be highly effective in:

- Reducing depressive symptoms
- Facilitating remission of major depression
- Increasing social support, resilience, and coping skills
- Reducing reported stress
- Increasing positive views of motherhood and children
- Reducing overall psychological distress
- Increasing functional abilities (compared to mothers who received home visiting alone)
- Improving self-reported mother-child relationships and nurturing parenting

The scale of the improvements for women receiving IH-CBT through *Moving Beyond Depression* are comparable to those found in studies of CBT with other populations and with antidepressant medications.^{62,63} Among mothers who received standard home visiting alone, there were no significant differences in outcomes between those who did or did not receive treatment in the community.

Both mothers and home visitors reported high levels of satisfaction with IH-CBT. This resulted in more engagement and participation in the home visiting program. With improvement from treatment, mothers receiving IH-CBT participated in 44 percent more home visits than their counterparts who received home visiting alone. These additional home visits were not the cause of reduced depression; however, they enabled these mothers to benefit from the parenting education, social support, referrals, and other elements of the home visiting program. IH-CBT is designed to be implemented alongside

home visiting, and a close working relationship between therapists and home visitors is essential to optimal outcomes.

Taken together, these findings indicate that efforts to address the mental health needs of depressed mothers participating in home visiting programs are likely to be more successful if treatment is provided in the home and in partnership with home visitors. In contrast, community mental health systems are less well used and less effective in achieving desired outcomes for this population.

Specific Study Results

The base research for *Moving Beyond Depression* was an initial, open trial of IH-CBT enrolled 26 first-time mothers served through either the Healthy Families America (HFA) or Nurse-Family Partnership (NFP) home visiting program model. Enrollment used a two-step process to determine eligibility, first a depression screening test and then a diagnostic assessment.^{64,65} Following treatment, 84.6 percent of mothers experienced full or partial remission of MDD. Substantial reductions in depressive symptoms between pre- and post-treatment were documented using the Beck Depression Inventory (BDI-II). In addition, this group of mothers showed increased functional status as reflected by the Brief Patient Health Questionnaire.⁶⁶

A subsequent study compared 64 home visited mothers who completed IH-CBT with 241 mothers served by the home visiting program that met the same screening criterion for depression (≥ 20 on the BDI-II at enrollment) but did not receive IH-CBT. There was a significantly greater reduction in depression symptoms in the IH-CBT group. This study included a demographic mix of white, African American, and Hispanic mothers and varying levels of education; however, more than 90 percent were single and 90 percent had low income. The substantial reduction in depression symptoms remained after controlling for demographic factors. Post-treatment, mothers who received IH-CBT

had decreased diagnoses of major depression, lower reported stress, increased coping, improved social support, and increased positive views of motherhood. Among the comparison group, 20 percent of depressed mothers received some mental health intervention in the community; however, it did not appear to be adequate to change their outcomes. This is likely related to a combination of factors such as: limited access to evidence-based treatment, high dropout rates in mental health services among low income populations, and high non-adherence rates for depression treatments overall.⁶⁷

A more detailed look revealed that a variety of participant characteristics and service patterns predicted lower depressive symptoms post-treatment. Compared to home visited mothers who still had clinically elevated levels of depression at post-treatment, those with fewer or no symptoms were younger, had:

fewer lifetime episodes of depression, had lower BDI-II scores at pre-treatment, had lower levels of symptoms suggesting a personality disorder, received more IH-CBT sessions, and received more home visits during the treatment. As expected, the number of IH-CBT sessions was predictive of better depression outcomes. Yet, the most robust predictor



was number of home visits. Mothers who were successfully treated received, on average, almost twice as many home visits in the first half of treatment than those who ended in the symptomatic category. Mothers who received increased home visits during treatment were more likely than those with fewer home visits to have reduced depression symptoms following treatment, even when controlling for other predictor variables (including the number of IH-CBT sessions).⁶⁸

While promising, the findings of initial studies were limited by the fact that a more rigorous randomized clinical trial research design was not used, there was no follow-up, and clinical moderators (e.g., comorbidity) were not considered. A randomized clinical trial was conducted to further test the efficacy of IH-CBT as implemented through *Moving Beyond Depression*.⁷⁰

Return on Investment

Mothers participating in home visiting (either the HFA or NFP program model) were identified at three months postpartum, again using a two-step process comprised of a screen and subsequent diagnostic assessment for confirmation. Approximately 100 mothers were randomly assigned to home visiting with IH-CBT or standard home visiting (in which mothers were permitted to obtain treatment in the community). Multiple measures of depression (including standardized tests, clinical interviews, and self-report methods) were administered at pre-treatment, post-treatment, and three-month follow-up.

Mothers receiving IH-CBT had: lower levels of self-reported depression, received lower ratings of depression severity on tests, had reduced levels of MDD, and demonstrated increased overall functioning, as compared to those in the standard home visiting group. The reduction in depression measures and improvements in functioning were statistically significant and were maintained over three-month follow-up. Again, the number of IH-CBT and home visits made a difference to outcomes. Also encouraging was the relatively high rate of treatment completion (48.9%). Indeed, mothers receiving IH-CBT had an average of 11.2 treatment sessions, a substantially higher dose of treatment relative to the average of 4.3 sessions in adult outpatient settings.⁷¹

Moving Beyond Depression has been successfully implemented in other sites.⁷² These include Boston (Alston-Brighton and surrounding neighborhoods), Connecticut (statewide), Kentucky (50 counties), Kansas (Wyandotte County), and Massachusetts (currently 8 urban areas, and expected to be 17 sites by the end of Fiscal Year 2015). Evaluations of the Boston and Connecticut programs have been conducted and show virtually identical outcomes as obtained in the original clinical trial. Results from a small scale replication of the IH-CBT trial in the Nurturing Families Network in Connecticut found that mothers receiving IH-CBT and home visiting reported sharp decreases in self-reported depression following treatment relative to those receiving home visiting alone.⁷³ Together the replication sites have identified each of the program elements, from screening through treatment, as integral to the success of *Moving Beyond Depression* at their sites.

A return on investment (ROI) analysis found that *Moving Beyond Depression* has potential to yield savings. As compared to community treatment, this in-home service could save up to \$57.5 million in lifetime costs per 1,000 mothers served. The savings result from anticipated reduced costs to intervene for children's adverse health and developmental outcomes.

Both clinical and economic studies have documented the negative impact and costs of depression on mothers and their children. Table 2 lists some of the most common adverse consequences of maternal depression in terms of both human and economic costs.

Economic costs are concentrated in: employment (e.g., lost work, lower productivity, increased disability); health care (e.g., medical care, mental health services); early intervention and educational services for children (e.g., cognitive and language delays); and child protective services or juvenile justice (e.g., child abuse and neglect, foster care placement). In addition, significant loss of income is associated with diminished educational achievement, fewer high quality job opportunities, and income lost to disability among women. Of particular importance to home visiting, depression undermines the investment made in home visiting services by utilizing additional program resources and contributing to poorer outcomes.

Specific economic costs have been attributed to some of these factors. Depression in adults costs \$83.1 billion annually in the United States, with 31% for direct medical care, 62% for workplace costs, and 7% for suicide/mortality related costs.⁷⁴ Maternal depression is associated with an increase in preterm births, which cost \$51,600 each on average.⁷⁵ In terms of parent and child outcomes, across the lifespan a family with a child with psychological disorders will earn \$300,000 less than their counterparts unaffected by mental health conditions.⁷⁶

Other studies have documented cost savings associated with successful treatment of depression. A study of one program to treat maternal depression among low-income women found that \$5.21 was saved for each \$1 spent.⁷⁷ This study looked at only four sources

of cost (program, child abuse and neglect, workplace productivity, and high school graduation), suggesting that the ROI is substantially underestimated. Another study looked at the cost effectiveness of CBT for adult depression and concluded: “the benefits (of treatment) to the whole economy are great...because the cost of the therapy is so small, the recovery rates are so high and the (public) cost of a person is so large.”⁷⁸

Collectively, the body of research on costs of depression and benefits of effective treatment clearly points to a highly favorable cost-benefit ratio. However, no single study has documented all of the potential costs of depression to mothers and children. Two studies have

affixed a specific cost number. One (as noted above) found a family income loss of \$300,000 over the lifetime due to childhood onset psychological problems. A second found that a depressed new mother cost \$22,647, although this calculation relied almost exclusively on costs related to risk for having a low-birthweight infant and overlooked the many other potential costs of depression to mothers and children.⁷⁹ It would seem reasonable to total these two numbers and add \$150,000 to cover other costs, yielding a total cost of \$500,000 per depressed mother. This, too, is likely to be an underestimate, but it provides a conservative metric with which to examine the ROI from effective treatment such as the IH-CBT provided through *Moving Beyond Depression*.

Table 2. Effects of Depression on Mothers and Children

Effects of Depression with Economic Costs	
Mother	Child
<ul style="list-style-type: none"> • Less likely to be employed • Lower educational achievement leads to lower paying job • If employed, more absenteeism and more presenteeism • More likely to have disability days • Decreased lifetime earnings • Decreased payment of taxes • Increased use of public assistance • Loss of future earnings due to death • Increased health care costs related to treatment of depression treatment, expensive acute hospitalizations, greater use of emergency room, treatment of other psychiatric and health conditions, and increased prenatal and birth complications 	<ul style="list-style-type: none"> • Increased risk for preterm birth • Cognitive delays and/or impairments may lead to early intervention services and special education services • Behavioral and mental health conditions (depression, ADHD, conduct problems) that may require treatment, lead to lower academic achievement, and have long term implications for employment and lifetime income • Increased risk for injury • Increased risk for physical health problems due to inadequate preventive care, late identification of illness, non-adherence to treatment • Increased risk for child maltreatment and child protective services, including placement in foster care • Increased risk for delinquency
Effects of Depression with Human Costs	
Mother	Child
<ul style="list-style-type: none"> • Dissatisfaction with parenting role • Insecure attachment with child • Poor coping with stress • Poor relationships with child and others • Chronic sadness • Hopelessness • Low self-esteem • Suicidality • Domestic violence • Anxiety • Increased risk for substance abuse • Social isolation and decreased community engagement • Poor quality of life 	<ul style="list-style-type: none"> • Basic physical and emotional need unmet • Not learning self-regulation skills • Unhappiness • Harsh and non-nurturing environment • Unstimulating environment undermines cognitive development and learning • Cognitive delays • Poor social skills • Poor relationships with peers • Biological over-reactivity to stress • School underachievement • Poor physical health

Design of Moving Beyond Depression

Moving Beyond Depression was developed to reduce maternal depression and its negative impact. The basics of the approach, in practice, are described below.

In-Home Cognitive Behavioral Therapy

IH-CBT is an adapted treatment that was designed to overcome certain barriers to implementation of traditional clinic- or practice-based therapies (e.g., lack of transportation, resistance to visiting a mental health setting). Accordingly, IH-CBT preserves the core features of CBT essential to its effectiveness, while making adaptations in setting, population, and context. Creative solutions and accommodations are made to ensure optimal treatment in home environments where privacy is sometimes difficult to ensure, the child is present, and unexpected interruptions occur.

IH-CBT offers advantages in that: 1) many of issues addressed in treatment occur in the home setting; and 2) the therapist is able to observe elements of the home that may contribute to mental health. The population for this IH-CBT is young, low-income, new mothers and the treatment focuses on issues relevant to this population, including transition to adulthood, parenting efficacy, relationship adjustment, and trauma history.

Identification, Screening, and Eligibility

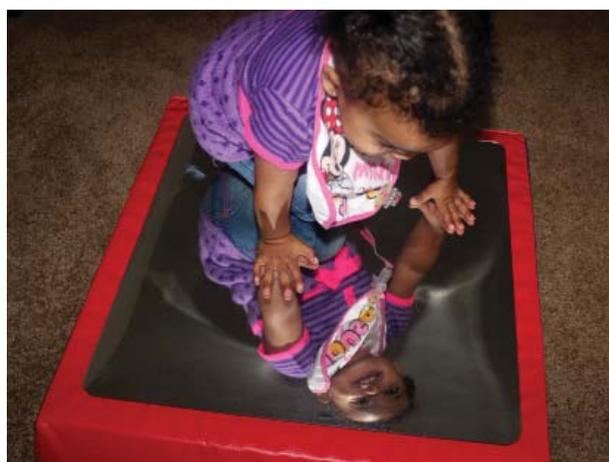
First, potentially eligible mothers are identified through screening and assessment. This process includes an offer of treatment as part of a voluntary home visiting program.

- Mothers are screened using standardized, validated tools (e.g., Beck Depression Inventory-II, Edinburgh Postnatal Depression Scale) administered by home visitors at specified times (i.e., at enrollment, and 3, 9, 12, 24, and 36 months postpartum).

- Home visitors briefly present the program to potentially eligible mother. Those mothers expressing interest in the program receive a diagnostic assessment conducted by the therapist or another appropriate assessor.
- The assessment is designed to confirm that the mother meets diagnostic criteria for MDD, and to establish baseline levels of maternal functioning. Assessment to determine diagnostic status is made using a brief semi-structured psychiatric interview. The assessment is given again at the end of treatment to determine treatment impact.
- Mothers are eligible if they meet criteria for MDD, and if they do not have a reason for exclusion. Mothers are ineligible if they have a certain conditions (e.g., psychosis, schizophrenia), or if they require more rapid treatment.

Treatment Strategy

- IH-CBT is grounded in the core principles and established procedures of CBT and uses specially trained therapist professionals.
- IH-CBT is delivered in the home by a licensed, master's level mental health professional. The therapist has prior training in CBT at the graduate level, participates in



an immersion training in CBT before training in IH-CBT, and is further trained and regularly supervised by the *Moving Beyond Depression* program staff.

- Treatment consists of 15 weekly sessions that last 50-60 minutes. Standard CBT treatment is augmented with clinical tools specially developed and adapted to the risks and needs of young, low-income mothers. A booster session is provided one month after treatment.
- Integrated doctoral level support helps masters level therapists in addressing the complex needs of depressed mothers with comorbidities and significant trauma histories.
- Operating in partnership with a home visiting program offers opportunities to optimize outcomes through close collaboration between home visitors and therapists. A close working alliance ensures that both practitioners are working towards the same objectives. Collaboration occurs through frequent written communication using a web-based clinical documentation system, and telephone contact as needed.
- The therapy summary and planning for the future is provided at the 15th session. It describes the treatment, lists what the mother had learned and goals that have been met, and delineates steps to take if symptoms recur.
- The home visitor attends the 15th session with the mother and the therapist and receives instructions regarding the plan, as well as ways to support the mother, maintain gains, and prevent recurrence of depression.

Steps to Implement *Moving Beyond Depression*

State or local home visiting programs that seek to implement *Moving Beyond Depression* work closely with ECS staff to assure fidelity and success. Adoption by a home visiting program or system involves three phases, which take place over a period of two years.

- In Phase I, an implementation plan is developed to map out the elements necessary for a successful launch and maintenance of *Moving Beyond Depression* in home visiting programs sites. The elements include: recruiting mental health staff, training home visitors and supervisors in identification and response to maternal depression; establishing referral procedures, setting up for data collection and management; and developing protocols for incorporating therapists into the home visiting program.
- Phase II is training. In this phase, therapists and on-site doctoral-level team leaders attend a two-day training in IH-CBT. Training includes: core content, strategies for interfacing with a home visitor and home visiting management, and in-depth review of IH-CBT elements and manual.
- In Phase III, ongoing training and support are provided to therapists, the on-site team leader, and service sites. This includes regularly scheduled site visits and telephone calls to discuss issues related to treatment implementation challenges.

Opportunities for States and Home Visiting Programs

State health, mental health, social service, and education systems throughout the country are increasingly focused on strategies to change the trajectory of poor early development for children at risk. Every state is using home visiting as one evidence-based strategy. Many states have also focused on approaches for screening for maternal depression; however, some such efforts have been criticized when women do not have access to and receive needed treatment. Opportunities exist to combine these efforts and increase the effectiveness of both by providing effective treatment for women enrolled in home visiting and identified through screening for depression.

Moving Beyond Depression, as an evidence-based approach for treating maternal depression, can be a valuable added component for home visiting programs, including the evidence-based models funded under MIECHV and managed by states. The recent research on *Moving Beyond Depression* demonstrates the potential for using IH-CBT to augment what evidence-based home visiting models offer families and significantly improve outcomes.

Figure 1 identifies key partners and stakeholders who have a potential role to play in implementation and financing for *Moving Beyond Depression*. For example, the MIECHV lead agency might play a role in identifying home visiting sites, providing funds for training or treatment, overseeing implementation, and using the program across the full home visiting system. The state's Title V Maternal and Child Health Program or Public Health agency might have resources to use for funding or staffing implementation of *Moving Beyond Depression*. A state mental health agency might provide funding for training and treatment or support a pilot project. The potential role of Medicaid is discussed at greater length below. State insurance agencies or their health reform exchange has the authority to approve treatment coverage as part of the Affordable Care Act or other private health plans.

Other state government entities such as a Children's Trust Fund, child welfare agency, or Temporary Assistance for Need Families (TANF) agency, might provide funding, support pilot projects, encourage use across home visiting models, and identify home visiting sites or communities at high risk as a way to prioritize implementation. Outside of government, private funders (e.g., foundations, corporate philanthropy) might play a role in funding start up costs, treatment, pilot projects, or evaluation.

Blending and Braiding Funds to Finance Moving Beyond Depression

Building on home visiting and health care policy, states have opportunities to augment their home visiting programs and treat more depressed mothers in their homes. As with any new service delivery approach both start up and ongoing costs are associated with *Moving Beyond Depression*. Key policy and finance opportunities for state home visiting programs that seek to implement *Moving Beyond Depression* exist in the following areas:

1. Addition to the state's MIECHV approach,
2. Augmentation for other state and local home visiting programs,
3. Embedded in a home visiting system, across several home visiting programs and models,
4. A service funded through Medicaid, and/or
5. Part of health and mental health reform.

Addition to the State's MIECHV Approach

In the context of MIECHV, states might use supplemental federal funds or state general funds to support *Moving Beyond Depression* as augmentation to a MIECHV evidence-based model that the state has previously selected and implemented. *Moving Beyond Depression* would be particularly appropriate as an augmentation for MIECHV models such as NFP, HFA, Parents as Teachers, and Early Head Start, which have been part of the research conducted. This is the approach used by Kentucky for their

Moving Beyond Depression, as an evidence-based approach for treating maternal depression, can be a valuable added component for home visiting programs, including the evidence-based models funded under MIECHV and managed by states.

Health Access Nurturing Development Services (HANDS) program, which is affiliated with HFA.

Also, states might consider applying in the future for implementation of *Moving Beyond Depression* as a promising practice under MIECHV. The strong evidence behind *Moving Beyond Depression* makes it a candidate for this type of funding. Kentucky uses both formula and competitive MIECHV grant funds to finance some *Moving Beyond Depression* costs. Kentucky included *Moving Beyond Depression* as a promising practice in its application for MIECHV funding. Massachusetts uses MIECHV competitive grant funds to as part of the funding for implementation of *Moving Beyond Depression*. While *Moving Beyond Depression* was listed as a promising approach in the Massachusetts MIECHV application, the state did not apply specifically for implementation of the program as a promising approach. Kansas similarly uses MIECHV competitive grant funds to support *Moving Beyond Depression* implementation.

Augmentation for Other State and Local Home Visiting Programs

Beyond MIECHV, states could use *Moving Beyond Depression* as an augmentation to a state or local “home-grown” or blended home visiting program. State leaders might identify and design a pilot in one local area, with one local program model. This was the approach used in selected Boston neighborhoods.

In identifying one or more potential pilot sites, look for an existing maternal depression

screening program operating in the context of home visiting and build from there.

In most states, funding for home visiting includes resources beyond MIECHV funding. States might use their more flexible resources to finance implementation of *Moving Beyond Depression*. Funding streams might include: the Title V Maternal and Child Health Block Grant, State General Revenues, state mental health funds, private foundation start-up funding, and so forth.

Embedded in a Home Visiting System, Across Several Home Visiting Programs and Models

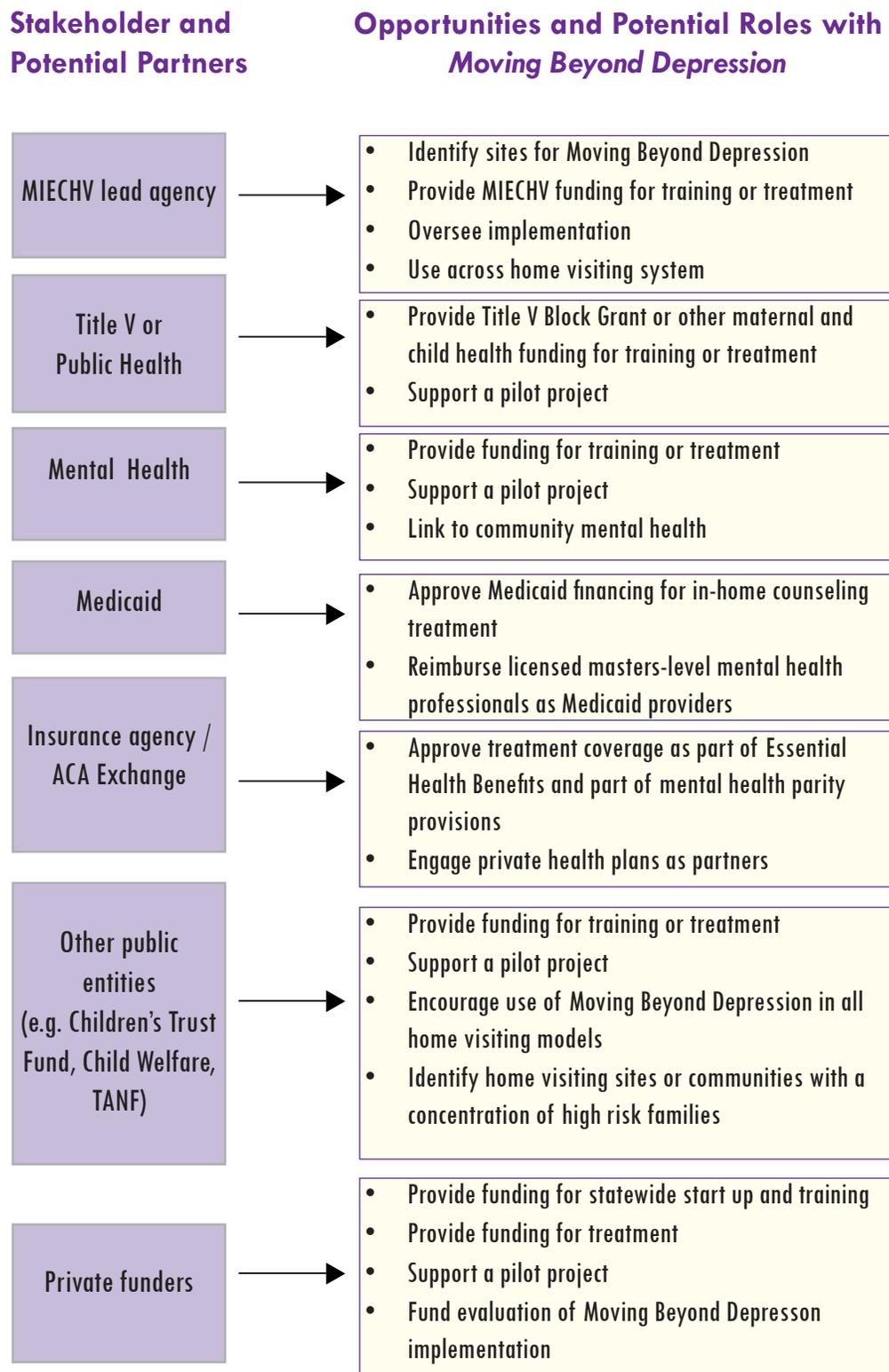
States with a systems approach to home visiting could start by requiring or encouraging systematic maternal depression screening in all home visiting programs. Then, adopt the *Moving Beyond Depression* protocol to ensure access to effective treatment. Another systems approach is to use federal, state, and/or local funds to provide training related to *Moving Beyond Depression* for both home visitors from various programs and mental health professionals.

State home visiting systems also could add data collection and reporting capacity related to maternal depression. Maternal depression screening, referral and treatment are already being measured through states’ MIECHV benchmark plans and could be measured across all home visiting sites, whether or not MIECHV funded.

A Service Funded through Medicaid

Medicaid is a primary source of health coverage for millions of low-income women during pregnancy and the postpartum period, including many who are served in home visiting programs. Medicaid coverage includes mental health services and could finance IH-CBT. While federal law does not contain explicit provisions concerning the exact types of mental health services that can be provided, all states finance mental health services for those eligible and enrolled in Medicaid. Medicaid reimbursement is available for mental and behavioral health services covered under various service categories, including: physician’s services, inpatient and

Figure 1. Partners and Stakeholders for Financing and Implementing *Moving Beyond Depression*



outpatient hospital services, licensed practitioner's services, clinics, rehabilitative services, inpatient psychiatric hospital services for individuals under age 21, as well as, prescription drugs. Examples of services in these categories include: counseling, therapy, medication management, psychiatrist's services, licensed clinical social work services, peer supports, and substance abuse treatment.

While fragmentation of services, gaps between the approaches of mental health and Medicaid agencies, and eligibility limitations are ongoing barriers, there are opportunities for providing access to care for maternal depression.^{80,81} Increased health coverage for women of childbearing age, greater emphasis on integration of primary care and mental health services, and increased attention to chronic conditions affecting Medicaid recipients are all trends that have the potential to leverage Medicaid funding for maternal depression screening and treatment.

Among sites using the *Moving Beyond Depression*, Kentucky and Massachusetts are using Medicaid as part of the financing for the program. In Kentucky, Medicaid (as well as some private insurance plans) is reimbursing for one-hour counseling sessions, while MIECHV funds and other public health resources support other costs. Similarly, Massachusetts bills Medicaid and private insurance plans for *Moving Beyond Depression* counseling as outpatient mental health visits. In Kansas and Ohio, discussions are underway to determine the potential future role of Medicaid in financing *Moving Beyond Depression* services.

A number of states are financing maternal depression screening through various Medicaid reimbursement approaches (e.g., California, Colorado, Illinois, Iowa, Louisiana, Massachusetts, Michigan, Oklahoma, Oregon, North Dakota, Virginia).^{82,83} *Moving Beyond Depression* and IH-CBT provide a way to address some of the barriers to treatment for women identified in these home visiting screening initiatives. For example, the Oklahoma Health Care Authority's program, SoonerCare, (Medicaid) developed a Maternal and Infant Health Social Work Benefit, which enables licensed clinical social workers to directly contract with Oklahoma Medicaid as



providers and bill for services to address psychosocial concerns of pregnant women.

In Virginia, if there is a positive maternal depression screen using the Behavioral Health Risks Screening Tool, patients can receive additional services, including case management support during pregnancy and through the child's second birthday. Through the Virginia MIECHV Program, a licensed clinical social worker has been hired to conduct research on screening among home visitors. In Massachusetts partnerships between the Medicaid agency, health plans, and public health led to enhanced coverage of maternal depression screening and treatment. These are the types of efforts that might be extended to structure and finance IH-CBT.

In 2013, the Centers for Medicare and Medicaid Services clarified that states can reimburse for preventive services "recommended by a physician or other licensed practitioner...within the scope of their practice under State law".* This change makes possible Medicaid reimbursement for preventive services delivered by a broad array of health professionals, including those that may fall outside of a state's clinical licensure system.** In some states, clinical social workers with master's degrees may not be independently licensed and could be among the non-licensed providers that would qualify for

* Section 42 CFR §440.130. 78 Federal Register 42160. July 15, 2013. Final Rule: Medicaid and Children's Health Insurance Program; Essential Health Benefits in Alternative Benefit Plans, Eligibility Notices, Fair Hearing and Appeal Processes, and Premiums and Cost Sharing; Exchanges: Eligibility and Enrollment. Centers for Medicare & Medicaid Services.

reimbursement in delivery of mental health treatment, including IH-CBT.

To determine a strategy for using Medicaid financing, states should consider the 3 E's—eligible individual, eligible service, and eligible provider.

Eligible woman?

- New mothers whose births were financed by Medicaid have continuing coverage for 60 days postpartum.
- Currently, between 25-65% of mothers have continued Medicaid coverage beyond 60 days postpartum.
- In the states adopting Medicaid expansion in 2014, more than 4 million women are likely to gain Medicaid coverage that will extend beyond 60 days postpartum.

Eligible, covered service?

- Medicaid finances mental health benefits.
- Some states may include the benefit as part of managed care contracts.

Eligible, qualified and enrolled provider?

- Are therapists qualified providers independently or as part of a mental health practice, primary care clinic, or health department?
- Are they licensed providers or could they be covered as non-licensed providers?

** Section 1905(a)(13) of the Social Security Act authorizes Medicaid payment for “*other diagnostic, screening, preventive, and rehabilitative services, including any medical or remedial services (provided in a facility, a home, or other setting) recommended by a physician or other licensed practitioner of the healing arts within the scope of their practice under State law, for the maximum reduction of physical or mental disability and restoration of an individual to the best possible functional level.*”

Part of Health and Mental Health Reform

In context of health reform, states have opportunities to maximize new coverage under Affordable Care Act Exchange/Marketplace health plans, Medicaid expansions, and other policies and innovations. Mental health, women's health, prevention, and new ways to deliver care in the community all were given priority by Congress in enactment of the Affordable Care Act.

The Mental Health Parity and Addiction Equity Act (MHPAEA), enacted as part of the Affordable Care Act, includes requirements for mental health parity in health coverage. Beginning in 2014, all new health insurance plans will be required to cover mental health and substance use disorder services comparable to coverage for general medical and surgical care. This parity requirement extends mental health and substance abuse benefits to an estimated 62 million Americans. Medicaid Alternative Benefit Packages, Medicaid managed care plans, and the Children's Health Insurance Program (CHIP) plans are required along with private plans. Thus, millions of women will have coverage for mental health treatment that they did not have previously.

The Affordable Care Act is also driving change in our health care system, with reforms aimed at making health care providers more accountable for quality and health outcomes and reforms aimed at augmenting prevention. States also might include *Moving Beyond Depression* as one element of an innovations project (by applying for funding from the Centers for Medicare and Medicaid Services) or Accountable Care Organization.

Finally, the Affordable Care Act encouraged the Secretary of Health and Human Services to continue activities on postpartum depression or postpartum psychosis, including research to expand the understanding of the causes of, and treatments for, these conditions. Activities include: basic research, epidemiological studies, development of improved screening and diagnostic techniques, clinical research for the development and evaluation of new treatments, and information and education programs for health care professionals and the public. In addition, it

authorized grants for projects to establish, operate, and coordinate effective and cost-efficient service systems to deliver or enhance outpatient, home-based, inpatient, and related services (including transportation, respite care, etc.), as well as information and education. It authorized \$3 million in 2010 and such sums as necessary in 2011 and 2012 to provide services to women at risk of postpartum depression. While appropriations have not reached this level, funding under this provision could aid in dissemination and implementation of IH-CBT.

Conclusion

Research on *Moving Beyond Depression* demonstrates the value of using IH-CBT to augment what evidence-based home visiting models offer families and the potential for improving the efficacy and engagement of families in home visiting. Increased use of *Moving Beyond Depression* in combination with home visiting could significantly improve outcomes for mothers, children, and families.

States now have opportunities to add this evidence-based, maternal depression treatment to their home visiting programs and systems. Using MIECHV, Medicaid, health reform, and other policy and finance options, states can add evidence-based treatment capacity to reduce, not just screen for, maternal depression among the high risk women served by home visiting programs.

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