



PROJECT THRIVE
Issue Brief No. 2

Reducing Maternal Depression and Its Impact on Young Children

Toward a Responsive Early Childhood Policy Framework

Jane Knitzer ■ Suzanne Theberge ■ Kay Johnson

January 2008

The National Center for Children in Poverty (NCCP) is the nation's leading public policy center dedicated to promoting the economic security, health, and well-being of America's low-income families and children. Founded in 1989 as a division of the Mailman School of Public Health at Columbia University, NCCP is a nonpartisan, public interest research organization.

Reducing Maternal Depression and Its Impact on Young Children: Toward a Responsive Early Childhood Policy Framework

by Jane Knitzer, Suzanne Theberge, and Kay Johnson

This issue brief reflects NCCP's continuing commitment to ensuring that every low-income child enters school with the skills to succeed, and that policymakers have access to the very best research to create policies that use public resources in the most effective, smartest way. It is based on a meeting convened through NCCP's Project THRIVE to identify and promote solutions to emerging issues that impact young children's healthy development and school readiness. The brief is being jointly published by Project THRIVE, through which NCCP serves as a resource to the Maternal and Child Health Bureau-funded State Early Childhood Comprehensive Systems (ECCS) systems program and Pathways to Early School Success, NCCP's on-going project to help policymakers, program administrators and practitioners address barriers that get in the way of reducing the achievement gap for young low-income children.

AUTHORS

Jane Knitzer, EdD, is the director at NCCP and Clinical Professor of Population and Family Health at Columbia University's Mailman School of Public Health. She has contributed many important studies on how public policies can promote the healthy development of low-income children and better support families, particularly those who are most vulnerable.

Kay Johnson, MPH, MEd, is a consultant to NCCP and director of Project THRIVE, which links policies for child health, early learning, and family support. She has broad expertise in many areas of maternal and child health and has led numerous studies of maternal and child health and early childhood policy, finance, and infrastructure issues.

Suzanne Theberge, MPH, is the research analyst for Project THRIVE.

ACKNOWLEDGMENTS

NCCP is deeply grateful to the participants at the NCCP meeting who shared insights, challenges and ideas so willingly (See Appendix), to our other key informants who shared their programs and experience with us, to Janice Cooper for her comments, and to Mareasa Isaacs whose analysis, *Community Care Networks for Low-Income Communities and Communities of Color*, guided and inspired this work. We are also especially grateful to Phyllis Stubbs-Wynn, who oversees our Project THRIVE work through the Maternal and Child Health Bureau.

Reducing Maternal Depression and Its Impact on Young Children: Toward a Responsive Early Childhood Policy Framework

Jane Knitzer ■ Suzanne Theberge ■ Kay Johnson | January 2008

“Dollars invested in moms are dollars that really pay off.”

– Dr. Frank Putnam, Professor of Pediatrics and Psychiatry,
University of Cincinnati. 2006¹

Introduction

Maternal depression is a significant risk factor affecting the well-being and school readiness of young children. Low-income mothers of young children experience particularly high levels of depression, often in combination with other risk factors. This policy brief provides an overview of why it is so important to address maternal depression as a central part of the effort to ensure that ALL young children enter school ready to succeed. It highlights:

- what research says about the impact of maternal depression on young children, particularly infants and toddlers, and how prevalent maternal depression is;
- examples of community and programmatic strategies to reduce maternal depression and prevent negative cognitive, social emotional and behavioral impacts on young children;
- key barriers to focusing more attention to maternal depression in policies to promote healthy early child development and school readiness;
- state efforts to address policy barriers and craft more appropriate policy responses; and
- recommendations for national, state and local policymakers.

Framing the Challenge

Depression is increasingly recognized as major world-wide public health issue. It has a negative impact on all aspects of an individual’s life – work and family – and can even lead to suicide. Typically, depression is discussed as an adult problem affecting women or men, and increasingly, it is recognized as a significant problem for children.² But far too rarely is depression, particularly maternal depression, considered through a lens that focuses on how it affects parenting and child outcomes, particularly for young children; how often it occurs in combination with other parental risks, like post-traumatic stress disorder; and what kinds of strategies can prevent negative consequences for parents, for their parenting and for their young children.

Defining Depression through a Parenting Lens

In the context of parenting, depression can be defined as:

- a combination of symptoms that interfere with the ability to work, sleep, eat, enjoy and *parent* (italics ours) and that affects all aspects of work and family life;
- an illness that frequently starts early in life, that may have a biological component and that produces substantial disability in functioning (whether it is defined as Major Depressive Disorder or depressive symptoms);³
- a common but invisible pathway to a cluster of adversities for adults who are parents, and their children, particularly mothers and their young children;
- a condition that responds to prevention and treatment.⁴

“If Mama ain’t happy, no one is happy.”

– Participant in a focus group for low-income women of color.
Dr. Mareasa Isaacs, Executive Director, NAMBHA. 2004⁵

1) Maternal depression is widespread, particularly among low-income women with young children.

Maternal depression is widespread across class and race, and has been linked to genetic composition, situational risk factors and circumstances, and environmental gene interaction.⁶ Disproportionately, it impacts low-income parents, whose depression is embedded in their life circumstances, poverty, lack of social supports and networks, substance abuse, intimate partner violence, childhood abuse, and stress linked to a life of hardship, and too often, no hope. (See box.) Research has shown correlations between race and ethnicity and depression,

Prevalence Data on Maternal Depression

- Approximately 12 percent of all women experience depression in a given year.⁷
- For low-income women, the estimated prevalence doubles to at least 25 percent.⁸
 - Estimated rates of depression among pregnant and postpartum and parenting women in general range from 5 to 25 percent.⁹
 - Low-income mothers of young children, pregnant and parenting teens report depressive symptoms in the 40 to 60 percent range.
 - Over half the mothers (52%) in a study of 17 Early Head Start programs reported depressive symptoms.¹⁰
 - Another study found that an average of 40 percent of young mothers at community pediatric health centers screened positive for depressive symptoms (site specific rates ranged from 33% to 59%).¹¹
 - Studies of women participating in state welfare-to-work programs indicate that depression and elevated levels of depressive symptoms range from 35-58 percent.¹²

NOTE: Some studies report clinical depression rates, while others report depressive symptoms. Some researchers believe that multiple depressive symptoms can be the functional equivalent of major depressive disorder as they produce similar functional pain and impairments.¹³

but the exact nature of the interaction is unclear. African American women have very high rates of depression; rates among Latino women vary from high to very low, although rates in Latina adolescents are uniformly high.¹⁴ But research also suggests that poverty is a more powerful predictor. For poor women, rates of depression are high *regardless of ethnicity*. One study showed equal rates of depression among African American and European American low-income women, and a study of TANF recipients did not find a difference in prevalence between ethnic groups.¹⁵ In effect, poverty trumps race as a factor in maternal depression.¹⁶

2) Maternal depression, alone, or in combination with other risks can pose serious, but typically unrecognized barriers to healthy early development and school readiness, particularly for low-income young children.

Maternal depression threatens two core parental functions: fostering healthy relationships and carrying out the management functions of parenting. The result, long tracked in child development research, has been linked to demonstrable reductions in young children’s behavioral, cognitive, and social and emotional functioning. The impact of depression varies by its timing (maternal depression during infancy has a bigger impact on a child’s development than later exposure), its severity, and the length of time it persists.¹⁷

Negative effects can start before birth

The negative effects of maternal depression on children’s health and development can start during pregnancy.¹⁸ While the biological mechanisms are not clearly understood, research on untreated prenatal depression finds links to poor birth outcomes, including low birth-weight, prematurity, and obstetric complications.¹⁹ The biological effects can continue; research has found that maternal depression in infancy predicts a child’s likelihood of increased cortisol levels at preschool age, which

If those treating domestic violence don't screen for depression and those treating for depression don't recognize post-traumatic stress disorder or social anxiety or if neither recognizes the impact on children, effective services and important resources are minimized.

– Dr. Mareasa Isaacs, Executive Director, NAMBHA. 2004²⁰

in turn has been linked with internalizing problems such as anxiety, social wariness and withdrawal.²¹

Maternal depression can impair critical early relationships

Recent neuroscience is clear that the primary ingredient for healthy early brain development is the quality of the earliest relationships from a baby's primary caregiver (which can be either parent, of course, but most often is the mother, especially for low-income children). Maternal depression can interfere with the early bonding and attachment process between mother and baby. Maternal depression has also been linked with negative relationships in early childhood, and with reduced language ability, which is key to early school success.²² Three year old children whose mothers were depressed in their infancy perform more poorly on cognitive and behavioral tasks.²³ Mothers who are depressed lack the energy to carry out consistent routines, to read to their children, or simply, most importantly, to have fun with them, singing, playing, and cuddling them.²⁴ Children of mothers with major depression are known to be at risk for behavior problems, and are also at high risk for depression or other mood disorders in later childhood and adolescence.²⁵

Maternal depression can impair parental safety and health management

The impact of depression in mothers has also been linked with health and safety concerns. Depressed mothers are less likely to breastfeed, and when they do breastfeed, they do so for shorter periods of time than non-depressed mothers.²⁶ Mothers who are depressed are less likely to follow the back-to-sleep guidelines for prevention of SIDS or to engage in age appropriate safety practices, such as car seats and socket covers.²⁷ Depression also affects the health services use and

preventive practices for their children. For example, depressed parents are also less likely to follow preventive health advice and may have difficulty managing chronic health conditions such as asthma or disabilities in their young children.²⁸

The cumulative impact of depression in combination with other parental risks to healthy parenting is even greater.

Depression in women often co-exists with other “parental adversities” and life stressors, particularly in low-income communities. These factors include, along with the hardships associated with not having enough money, substance abuse, domestic violence, and prior trauma. A recent analysis of a birth cohort from 1998-2000 that followed children from infancy up to age 3 years in 18 cities provides important data. On the positive side, half of the mothers in the sample had no risks. But of the half who did, one-third of those had more than one risk,* and as the number of risks increased, so too did the likelihood of behavioral problems related to aggression, anxiety and depression and inattention and hyperactivity in the children.²⁹ At age three, of young children of parents who experienced no risk factors, 7 percent were aggressive, 9 percent anxious and depressed, and 7 percent hyperactive. The comparable figures for young children whose moms experienced three risk factors were 19 percent, 27 percent and 19 percent. The study also found that maternal depression and anxiety is associated with a stronger risk of child behavior problems than four other risks tracked (smoking, binge drinking, emotional domestic violence and physical domestic violence).³⁰

* Risks measured included major depressive episode (14%); generalized anxiety disorder (3.6%); smoking (28%); binge drinking or illicit drug use (5%); emotional domestic violence (21%); and physical domestic violence (9%).

3) Depression in other caregivers can also impact the early development of young children.

Fathers

Overall, depression in fathers is estimated at 6 percent,³¹ with community sample prevalence rates ranging from 1.2 to 25 percent.³² Eighteen percent of fathers in Early Head Start report depressive symptoms.³³ In the 18-city study highlighted above, fathers had lower rates of major depression and anxiety disorder, but higher rates of substance abuse (including smoking, binge drinking and illicit drug use). In families where both parents are depressed, the effects on children are compounded. It is also noteworthy that some studies show that depression in fathers is strongly related to maternal depression: rates of paternal depression are higher when mothers suffer from post partum depression, ranging from 24 to 50 percent.³⁴ Further, non-depressed fathers offer a protective effect on children of depressed mothers.³⁵

Grandparents

While there is little research on depression in grandparents raising children, even the scant data that we have suggest that as states expand strategies to address maternal depression, they should take a family and indeed intergenerational perspective. Over a quarter of Head Start grandparents who are primary caregivers were mildly depressed (26.8%) and another quarter were either moderately depressed (9.8%) or severely depressed (17.2%); in effect, half of the sample.³⁶ Thus these rates are comparable to those of mothers. A study by Chapin Hall Center for Children of grandparents who are the full-time caregivers of their grandchildren found that over a third (36.8%) scored above the CES-D (a depression screening tool) cutoff for depression, and an additional group reported occasional or past depression. The higher CES-D scores were significantly associated to parental incarceration; grandchildren with emotional behavior issues; and grandparents' perceptions of their own physical health and well-being.³⁷

Other caregivers

Not surprisingly, since many who provide child care and work in early learning programs are themselves low-income women, emerging research also highlights the impact of depression on other caregivers and on the child care system in general. (See box.)

Depression in child care providers exacerbates problems in early childhood programs and is related to the high levels of expulsion from child care.

- Research shows that caregivers in low-income and non-subsidized care centers were more likely to suffer from depression than the average female U.S. population.³⁸
- Child care center directors and caregivers with depression symptoms were more likely to leave the profession than those without depression, leading to a less experienced workforce, compounding the problem.³⁹
- A study of 1,217 non-familial caregivers found caregivers who were depressed were less sensitive, more withdrawn, and interacted less frequently with the children than those who were not depressed, particularly for caregivers in family child-care settings and caregivers with less education.⁴⁰
- In a study of young children being expelled from child care centers, depressed caregivers were more likely to expel children than non-depressed caregivers.⁴¹

4) Much is known about how to treat depression in women but too often women, especially low-income women, do not get appropriate help.

Depression is in general, a highly treatable disease. It is responsive to combinations of traditional cognitive and interpersonal treatment strategies, to medication, and to creating peer-to-peer support groups.⁴² Studies examining the efficacy of standardized treatment for low-income populations, particularly with respect to the use of cognitive-behavioral therapies suggest that core treatment strategies need to be adapted, for example, with more emphasis on engagement strategies, or using phone, rather than face-to-face interventions.⁴³ But even with adaptations, there is another limitation of traditional treatment for parents.

Most interventions for depression address only the adult; they do not address the adult as a parent, and they do not actively include strategies to prevent or repair damage to the early parent-child relationship, which, as we know from early brain science, is critical to healthy early development.⁴⁴ Further, there is very little research that tests the efficacy of strategies that address maternal depression in low-income women with multiple risks. In fact, women with multiple risks are often excluded from research. But even when treatment strategies are linguistically and culturally appropriate and

“The gap between the availability of good treatment for parents and the utilization of treatment is enormous—what we tolerate for depression, we would not tolerate for diabetes.”

– Dr. William Beardslee, Academic Chair, Department of Psychiatry, Children's Hospital Boston. 2006⁴⁵

research-informed, often there are too few appropriately trained providers, particularly providers of color.⁴⁶

Even more significant is that many low-income women lack access to health insurance in general, or mental health insurance in particular, creating an additional set of hurdles for them. Medicaid does allow the states to cover parents of eligible children, but in most states, eligibility levels are very low. (See box.)

Focus groups with low-income women from multiple ethnic groups also make it clear that often the women are reluctant to seek treatment because of how they perceive depression, and what acknowledging the need for treatment might mean for them and their family.⁴⁷

For example, many women think how they feel is just “the way it is;” that depression comes with the reality of their life situations. Secondly, they are very leery of the stigma involved in admitting they have a problem. There is great distrust of mental health agencies, including community mental health centers. And, most important of all, women are fearful of what admitting to depression will mean for their children. Many are reluctant to take medications because they fear what the side effects will do to their parenting (such as not being able to get their children ready for school). Others fear that if they are not seen as good parents, child welfare will come and take their children away. On the other hand, researchers have successfully adapted traditional treatments to be more responsive to women by addressing trauma, using outreach and strengthening the focus on educational and support approaches.⁴⁸

Parental Access to Mental Health Services through Medicaid⁴⁹

States make choices about parental eligibility levels for access to Medicaid/SCHIP, which means they can, in theory, have access to mental health services.

For pregnant woman,

- 16 states set eligibility levels at 200 percent or more of the federal poverty level (\$20,650 for a family of four in 2007), the remainder, between 133 percent and 200 percent of the poverty level.

For working parents,

- 5 states set eligibility levels at 200 percent of the federal poverty level; 14 states set eligibility levels at less than 50 percent of the federal poverty level.
- 35 states set eligibility at or below 100 percent of the poverty level; 14 of them at or below 50 percent of the poverty level.

For nonworking parents,

- 35 states set eligibility levels at less than 100 percent of the federal poverty level; 30 of them at 50 percent or less than the poverty level.

Note: See also 50 state profiles of early childhood policies: <www.nccp.org/profiles>.

Themes from Focus Groups with Low-Income Women⁵⁰

- Many low-income women and women of color have difficulty recognizing depression, because they see symptoms as naturally occurring events that are part of every-day life.
- Uniformly, women value their children; recognize the impact of depression on them; and are fearful of losing their children, or have already experienced loss through immigration, child welfare etc.
- Most women need and crave support for their mothering role, and value greatly support from others when they get it.
- Trusting relationships with providers who understand their daily life and cultural realities is key to women following through on treatment.
- Concerns about the use of medications as the treatment of choice in primary health care and mental health settings are a deterrent to treatment.

Note: Isaacs based this analysis on data from three separate sets of focus groups of low-income women of color.

Low-income Women, Access to and Use of Traditional Treatment

- Estimates are that 80 percent of all who receive treatment for depression are helped. Estimates about what percentage of those who need help get it range from a high of 57 percent to a low of 20 percent, not controlling for income.⁵¹
- Low-income women and women of color consistently have less access to, or are less likely to seek treatment.
 - A study of women receiving public assistance found 43 to 50 percent of TANF recipients had experienced depression for more than short periods of time in the last year,* yet only 11 to 13 percent were receiving treatment for depression.⁵²
 - A study comparing access to treatment among white women, African American women, and Latino women found that of those who reported moderate to severe depressive symptoms, 58 percent of the white women reported a mental health visit, compared to 36 percent of African American women and 11 percent of Latino women.⁵³
 - Low income women are also more likely to be given older medications than non-poor women.⁵⁴

* When broken down by age, rates were highest among the 40+ age group, with 57 to 60 percent reporting depression in the last year, and rates were lowest in the 18-24 age group, with 35 to 38 percent reporting depression in the last year. Rates vary by state, but range within about four percentage points.

What Can Help Parents With or At Risk of Depression and Their Young Children?

Parental depression can pose a serious risk to young children, but it is not a sentence either for a mom or for her young children. Promoting early identification and screening and, for low-income women, adapting and making traditional treatments more accessible will help. Both research and reports from the field suggest that educating parents about the effects of their depression on their children may also encourage mothers to seek treatment. Some practitioners have found that presenting maternal depression treatment as a “gift for your child” to be highly effective to mothers who may otherwise be resistant to treatment.⁵⁵ Other important strategies are also emerging that center around offering family-focused services in settings that parents trust, such as doctors’ offices or early childhood programs.

A family approach to treatment for all women with young children, but particularly for low-income women, in settings that they trust represents an opportunity for interventions that can help both young children and their parents.⁵⁶ It is, in other words a “two-fer.” Treatment for the mom becomes prevention or early intervention for the child (and for the parent-child relationship). Early childhood programs can also provide such supportive experiences for parents that they may also prevent depression or reduce the need for more formal treatment in some families.

Below we highlight examples of emerging efforts across the country to address depression in the context of parenting young children. In general, these efforts involve three types of strategies:

- screening and follow-up for women, typically in ob/gyn or pediatric practices;
- targeted interventions to reduce maternal depression and improve early parenting in early childhood programs such as home-visiting and Early Head Start Programs; and
- promoting awareness about the impact of maternal depression and what to do about it for the general public, low-income communities, and early childhood and health practitioners.

“A focus on maternal depression as a “family” intervention can support strengthening families, attachment to work and employment, and greater assurance that young children will enter school ready to learn.”

– Dr. Mareasa Isaacs, Executive Director, NAMBHA⁵⁷

Screening and Follow-up

Early detection leading to treatment can be important in reducing the impact of depression on women and young children. One strategy that states and communities are implementing is to identify, through the use of standardized screening instruments, women who are experiencing depression who are pregnant or parenting young children. Screening is being done in a variety of settings including pediatricians’ offices, women’s health clinics, and obstetrics/gynecology practices. When the screening is implemented in pediatric practices, it is often part of a child-focused effort to increase developmental screening.

The American College of Obstetricians and Gynecologists (ACOG) recommends psychosocial screening of pregnant women at least once per trimester (or three times during prenatal care), using a simple two question screen and further screening if the preliminary screen indicates possible depression.⁵⁸ Others support the use of standardized, validated tools. But there is research showing that even asking parents questions about how they are feeling and what they are facing makes it possible to discuss otherwise seemingly off-limits issues. Although there has been concern that families would find screening intrusive, some evidence suggests that most seem to welcome it.⁵⁹

Experience also suggests that screening should be readily available in settings where mothers are, should be easy for both the provider and the client, and should involve building the infrastructure to support follow-up. The screeners must be trained, and a referral/follow-up system should be in place before screening is implemented so that those doing the screening know how to respond and where they can turn if a problem is identified.

Tools for Screening

- The most common validated screening tools used to detect maternal depression are the **Edinburgh Postnatal Depression Scale (EPDS)**, the **Postpartum Depression Screen (PPDS)**, the **Beck Depression Inventory-II (BDI-II)**, and the **Center for Epidemiological Studies-Depression Scale (CES-D)**. All are more sensitive to identifying major depressive disorder, but can accurately identify minor depressive disorders as well.^{60*}
- ACOG recommends a simple two question screen for all pregnant women (1. Over the past two weeks, have you ever felt down, depressed, or hopeless? 2. Over the past two weeks, have you felt little interest or pleasure in doing things?), with further screening for those women whose answers indicate possible depression.⁶¹
- Studies found that a two-question paper-based screen, followed by a brief discussion with the mother by a pediatrician, was both feasible and effective in identifying women who needed follow-ups or referrals. One of the studies examined the difference between a verbal interview and a paper form, and the paper screen was found to be far more effective.⁶²

* Some research suggests that due to typical changes in normal pregnancy and postpartum recovery, general depression screening tools may show high rates of false positives, indicating that postpartum-specific depression screening tools may be more effective. (Holden, Jeni; Cox, John. 2003. *Perinatal Mental Health: A Guide to the Edinburgh Postnatal Depression Scale (EPDS)*. London: RCPsych Publications.)

Screening for Maternal Depression in Action

- In **North Carolina**, a project funded by The Commonwealth Fund supported through its ABCD I project (described below) piloted a project to increase formal developmental screening and surveillance for Medicaid-eligible children receiving Early Periodic Screening, Diagnosis, and Treatment (EPSDT) services in pediatric and family practices. Beginning in one county in 2000, the project assisted pediatric practices in implementing an efficient, practical process for young children for screening, promoted early identification and referral, and facilitated the practice’s ability to link to early intervention and other

community services. Once the approach took hold, the designers began to embed maternal screening into the project. The approach is now used statewide in North Carolina and has spurred similar initiatives elsewhere.⁶³ It has also been the catalyst for a statewide policy change in North Carolina's Medicaid program that is discussed below.

- In **Chicago**, spurred by the deaths of several women who were suffering from maternal depression, the **UIC Perinatal Mental Health Project** was founded to enhance the health care system's early recognition and treatment of perinatal depression. The project has trained over 3,000 providers in specific tools to aid screening assessment and treatment. Technical assistance on implementation of these procedures is available for clinics and providers. A key component of the intervention is telephone-based consultation for the primary care providers to ensure they have access to additional information and guidance when necessary. In addition, a medications chart was developed and widely disseminated to assist primary care providers in treating perinatal depression. This work is funded in part by a HRSA-MCHB Perinatal Depression Grant. With support from the Michael Reese Health Trust and Healthcare and Family Services, UIC is also working on two alternative approaches to treatment of perinatal depression for HFS-enrolled providers and women. A "stepped care" model provides training and tools to primary care providers to assess, treat and refer women with perinatal depression. A self-care tool provides women with suggestions for dealing with cognitive behavioral issues and help them emerge from perinatal depression.⁶⁴
- The **MOMobile** program, based in eight sites in southeastern Pennsylvania, under the auspices of the Maternity Care Coalition, sends community health workers around neighborhoods to support pregnant women, new parents, and families with infants. The advocates link families with services and supports, provide parenting education, provide service referrals, and distribute baby supplies and food in emergency situations. Through a Pew Charitable Trusts grant, MCC's social workers and community

health workers have begun screening newly registered clients at all eight sites for perinatal depression using EPDS, totaling about 1,500 women each year (previously, clients at some of the eight programs were screened). The overall program has served over 50,000 families since its founding in 1989.⁶⁵

Targeted Interventions in Early Childhood Programs to Address Depression*

A potentially powerful, but still underutilized strategy is to embed explicit interventions designed to prevent, or reduce depression and its harmful impacts on young children into early childhood programs, especially home-visiting and Early Head Start programs. In these programs addressing maternal depression is an investment in improved outcomes for the children. Typically, the interventions involve a focus on improved parent-child relationships and parenting practices. But it is important to underscore that family-focused interventions are not mental health as usual, where the adult is treated, and sometimes the child is either treated or screened, but they are not treated together.

Home-visiting programs, whether they are stand-alone, or a component of Early Head Start or through federally funded Healthy Start programs, are available in many communities across this country and represent an important, but underutilized opportunity to prevent and address maternal depression and its consequences for young children.

Research on **Early Head Start**, which is a nationwide, comprehensive family support and child development program that seeks to enhance all aspects of development for infants and toddlers at the poverty level, has paid special attention to maternal depression. An initial study found that depressed parents participating in Early Head Start were more likely than the control group to improve their parenting practices and have children who were less aggressive or negative when interacting with peers; had more positive parent-child interactions; were less likely to receive harsh discipline strategies; and overall, were more engaged and attentive.⁶⁶ The follow-up study, two years after the program, shows fewer

*There are also powerful individual therapeutic strategies that engage parents and children. The dyadic therapy model teaches a mother how to read, interpret, and respond to her infant's cues, and assists the mother in dealing with her emotions and needs related to motherhood. The model improves attachment, increases both maternal and child sensitivity, and reduces incidence of abuse and neglect, and is effective even when the mother is depressed. (Parent-Child Mental Health Interventions, Zero to Three Fact Sheet. Zero to Three, National Center for Infants, Toddlers, and Families.)

depression symptoms among women who participated in Early Head Start than in the control group.⁶⁹ A combination of child factors such as improved cognition, vocabulary at ages two and three; and improved child engagement at age three; and family factors, such as improved parenting skills, reduced parenting distress, seems to account for the reduction in depression.⁶⁸

Augmenting Early Childhood Programs⁶⁹

■ Family Connections in Head Start: Taking Prevention Seriously

In Boston, the **Family Connections** project is a strength-based prevention model that is being implemented across six Head Start and Early Head Start sites. The core elements of the program are to:

- build competence and resilience in HS/EHS staff in order to strengthen staff’s ability to engage around issues of depression and adversity;
- provide hope, to enhance parent engagement and parenting skills;
- strengthen meaningful teacher-child interactions related to emotional expression and adversity; and
- better identify and plan for needed services for children and families in emotional distress.

Family Connections (which is part of a major preventive intervention study) is based on lessons from several intervention models including an empirically tested family-focused intervention developed for to help older, middle class children and parents cope with depression.⁷⁰

Reports by Head Start parents, teachers, and director showed that it is feasible to deliver training sessions linked to consultation and to develop and sustain parent and teacher activities. Most strikingly, staff turnover and sick days decreased markedly in more than one center in response to the program. Staff also report increase in skills. Positive change in teacher attitudes and practices relating to mental health and related adversities were evident in all centers. Findings varied by center, based on site organization and readiness.⁷¹

■ Every Child Succeeds (Cincinnati): Addressing Depression Directly

Recognizing that the challenges of helping depressed moms cuts across different home-visiting models, **Every Child Succeeds** has developed and approach

that embeds cognitive behavioral therapy into three different home visiting models. Pilot results show that the two-generational approach resulted in significant decreases in parental depression and improved language and cognitive functioning in infants and toddlers.⁷² ECS therapists provide an adapted form of cognitive behavior therapy to mothers in their homes, working to treat depression and prevent relapses, as well as maximize the effectiveness of the home visiting program. The program’s success rates are comparative to antidepressants or typical cognitive behavior therapy.⁷³ The early results show that of the 29 percent of mothers who enter ECS with clinically significant levels of depression, half are no longer depressed after nine months in the program.⁷⁴ A randomized control trial is now in progress that will also track child outcomes.

Every Child Succeeds is a collaborative regional program that has three founding partners: Cincinnati Children’s Hospital Medical Center, Cincinnati-Hamilton County Community Action Agency/Head Start, and the United Way of Greater Cincinnati. Funding comes from a public-private partnership that includes Medicaid, state and county funding, United Way of Greater Cincinnati agencies, corporate and individual sponsorships.

Two other strategies reflecting practice and experiential wisdom should also be noted: peer-to-peer support/recovery groups for depressed women in low-income communities, and expanding access to mental health consultants in both early childhood programs (including home-visiting programs) and health care settings, such as pediatric practices.

Peer-to-peer support groups, frequently called Sister Circles, have been shown to reduce depression in black and Latino women.⁷⁵ The groups provide support and social networks, and they may particularly appeal to women who fear the stigma of traditional mental health services.⁷⁶ Most groups do not focus on young children; however, we did identify one program that focuses on parents with infants and toddlers.

- In New York City, the Caribbean Women’s Health Association organizes the *Community Mom’s Program*, a program for immigrant women who are pregnant and parenting children, birth to age two. The program provides health education workshops,

Policymakers should focus serious attention on maternal depression as part of the larger efforts across the country to improve healthy developmental and school-readiness outcomes in young children.

support services, home visiting, and screening and referrals for maternal depression.⁷⁷ Active, older community members were recruited to provide direct services, such as home visiting and community engagement. The Health Workers build strong connections with mothers to both build social support networks and to provide education about maternal depression at the one-on-one and community level. Because the Health Workers come from the communities in which they work, they are uniquely equipped to understand the roles of racism, cultural gender roles, and stress of the daily lives of the women.⁷⁸

Linking mental health consultants to home-visiting programs is another approach to strengthening the capacity to respond to families with depression and other risks. The consultants' role is to help the home-visitors identify and respond effectively to relationship based problems, including depression, to help home-visitors decide if referrals are needed and in some programs, to work directly with the family alongside the home-visitor. Below is an example of embedding a mental health consultant in the Nurse Family Partnership Program.

■ **Louisiana Nurse-Family Partnership Program: Adding Mental Health Consultants**

The Louisiana Nurse-Family Partnership Program augmented the standard nurse intervention with extra training and with mental health professionals in order to deal with the increased infant and maternal mental health risks they knew to be present in the Louisiana population, including maternal depression. In a preliminary trial, the nurses and the mental health consultants received intensive training in infant mental health issues and child development and then worked together in an extremely high-risk population, with one consultant per site nursing team (typically eight nurses and one nurse supervisor for 160 families). While the study was small, it indicated that incorporating mental health consultants into

the home visiting program strengthened the team approach of the Nurse-Family Partnership, increased the skills of both the nurses and the clinicians to deal with maternal and infant mental health issues, and allowed the consultants to reach a greater number of families than would otherwise be possible.⁷⁹

These “on-the-ground” examples suggest that core components of successful efforts to address maternal and other risks in early childhood settings:

- link services and supports for parents and children, through formal and informal strategies;
- provide training and support to home visitors, teachers and child care providers to help families and to get support for their own depression;
- help parents address specific parenting challenges related to depression and other adversities;
- ensure that children in higher-risk families have access to high-quality child development programs like Early Head Start to reinforce social and emotional skills and early learning opportunities; and
- provide clinical treatment when it is needed in settings families trust.

Building the Policy Framework

State Efforts

The lesson from research is clear: adult depression is not only bad for adults, it is bad for children, especially young children. Yet crafting a coherent policy response beyond demonstration programs is very difficult. A basic issue is that most low-income women, as noted above, lack access to health insurance, or if they have it, coverage for mental health. Policy mechanisms to pay for screening and follow-up are limited. Even more challenging is sustaining family-focused interventions in the context of early childhood programs such as home-visiting and Early Head Start. In fact, most of the initiatives highlighted above are either foundation funded, or time-limited research and demonstration programs. Few states have the capacity, nor are there federal incentives, to take research-informed practices to scale. At the same time, states are trying to respond.

Using ABCD as a Catalyst

The major strategy that is emerging across the country, largely as the result of an on-going project developed by the Commonwealth Fund's Assuring Better Child Health and Development (ABCD) program, is screening for maternal depression, either in context of pediatric practice or prenatal care. The ABCD program, administered by the National Academy for State Health Policy (NASHP) is designed to assist states in improving the delivery of early child development services for low-income children and their families. The first ABCD consortium (ABCD I) was created in 2000 and provided grants to four states (NC, UT, VT, WA) to develop or expand service delivery and financing strategies aimed at enhancing healthy child development for low-income children and their families.

The ABCD II Initiative, launched in 2003, is designed to assist states in building the capacity of Medicaid programs to deliver care that supports children's healthy mental development. The initiative is funding work in five states (CA, IL, IA, MN, UT).⁸⁰ An additional 20 states currently receive support through the ABCD Screening Academy. Some of the ABCD II sites have integrated maternal depression screening and pediatric social-emotional screening into primary care. Below we

highlight policy activities related to, or including maternal depression in two states.

- **North Carolina, the North Carolina ABCD I initiative.** The North Carolina effort to promote parental screening for depression is part of a larger effort to promote and pay for developmental screening for all young children. After the project to test strategies to increase screening in pediatric offices was successfully replicated in nine counties (see earlier description), it was expanded to cover the state, backed by formal changes in the state Medicaid policy in 2004. The policy requires that practices to use a formal, standardized developmental screening tool at 6, 12, 18, or 24 months and 3, 4, and 5 years of age, and as of 2006, more than 70 percent of children were being screened at well-child visits, compared to an average of only 15.3 percent prior to implementation.⁸¹ Parents are screened for depression by their children's primary care providers. North Carolina has also provided for parental access to treatment. They have expanded coverage to reimburse for up to 26 mental health visits for covered children. Parents can be seen under their child's Medicaid benefits for the first six visits, and providers can include PCPs, LCSWs, and psychologists. The project has worked to co-locate mental health providers within primary care practices, which both makes it easier for families to access care and reduces stigma by delivering services within locations and communities where parents are already comfortable.⁸²
- **Great Start Minnesota, the Minnesota ABCD II initiative,** integrates mental health screening into pediatric care. The clinic systems co-locate mental health professionals into pediatric clinics. While the focus is on children's mental health, parents are screened for mental health issues during the prenatal and perinatal periods, and for postpartum depression. In addition, the project assisted with passing the 2005 Postpartum Depression Education legislation in 2005, which requires physicians, traditional midwives, and other licensed health care professionals providing prenatal care to have information about postpartum depression (PPD) available, and hospitals to hand out written information about postpartum depression to new parents as they leave the hospital after birth.⁸³ The legislation also requires the Minnesota Department of Health to work with a broad array of health care providers, consumers, mental health advocates, and

families to develop materials and information about postpartum depression.

The efforts just described generally involve multiple stakeholders coming together to figure out how to use existing resources in ways that will maximize their impact for mothers with depression and their young children. In particular, they are embedding screening for treatment across settings (in ob/gyn as well as pediatric practices) and they are finding ways to extend parental eligibility through Medicaid. However, the recent regulations proposed by the Center for Medicare and Medicaid Studies pose serious threats to many of these strategies.

Enacting State Legislation

At least one state, New Jersey, has enacted legislation requiring screening for depression and strengthening the capacity to respond to the identified need.

- **New Jersey enacted the Postpartum Depression Law** in April, 2006, that requires physicians, nurse midwives, and other licensed health care professionals to screen new mothers and to educate pregnant women and their families about post partum depression.⁸⁴ New Jersey has long been at the forefront of postpartum depression action and legislation, due in part to the advocacy work of Mary Jo Codey, the wife of the former governor Richard Codey, and this was the first law in the country to require health care providers to screen all women who have recently given birth, and to educate women and families. The bill provides \$4.5 million for a comprehensive program, including the establishment of a statewide perinatal mental health referral network. New Jersey is also the original developer of the **Speak Up When You're Down** campaign, which is now used in Washington State. (See box.)

Using the State Early Childhood Comprehensive Systems (ECCS) grants to leverage change

In a number of states the ECCS coordinators and the ECCS grant itself have been the catalyst for focused, cross-system attention to maternal depression and how it impacts the broader early childhood goals. For example:

Speak Up When You're Down in Washington State

Washington State funds a public awareness campaign to educate women and their families about the symptoms and treatment of postpartum depression. The **Speak Up When You're Down** campaign, first developed by New Jersey, is led by the Washington Council for Prevention of Child Abuse and Neglect, along with partner organizations, including community members, educational institutions, and professional organizations in Washington State. The campaign, which started in 2005 through the HRSA grants, provides educational materials and runs a warm line for mothers suffering from post partum depression.⁸⁵ The program had no funding for a year but was refunded by a line item in the budget (through a champion within the state legislature) for \$250,000 for two more years, starting July 1, 2007. The program's new goals include expanding the campaign to five languages (English, Spanish, Vietnamese, Russian, and Somali); ensuring that the materials are culturally competent; and creating a public service announcement campaign for television, print, and radio. The Campaign also partnered with the University of Washington School of Nursing to support a Web-based provider training that was developed by the School on a grant.⁸⁶

- As part of **Iowa's** ECCS activities, Maternal Depression Screening: Train the Trainer workshops are offered in partnership with the Iowa departments of Public Health, Human Rights, Management, Education, Human Services, Prevent Child Abuse Iowa, Head Start Collaboration Office, and the University of Iowa's Depression and Clinical Research Center. As of the end of fiscal year 2007, 34 trainers were trained at the Maternal Depression Screening: Train the Trainer workshops, and these trainers held 15 local trainings for providers in Iowa. Preliminary results from two demonstration sites indicate a 70 percent increase in rates of screening for maternal depression.⁸⁷
- **Rhode Island's** ECCS project includes supporting screening in child care and primary care settings, and increasing the capacity of service providers to address parent and family behavioral health issues, through treatment and referral as objectives. Watch Me Grow RI trains participating pediatric and family practices to screen parents using the Early Childhood Screening Assessment, which has four questions that directly screen for maternal depression. Providers are also trained in how and where to refer parents who screen positive for depression.⁸⁸

- In **Connecticut**, the ECCS Director also facilitates the Statewide Perinatal Depression Screening Workgroup. The Department of Public Health convened a “Perinatal Depression Screening: Implications for Consumers and Providers” summit in May 2006, and has launched a perinatal depression screening public awareness campaign. A pilot perinatal depression screening project has been started in two community health clinics, and efforts are underway to institutionalize perinatal screening in DPH funded perinatal case management programs.

Putting It All Together

Over the past several years, Illinois has focused major energy on improving and linking its efforts on behalf of young children. Illinois has a strong state policy framework that includes legislation that calls for preschool for all young children and includes a set-aside for infants and toddlers. In addition, the state has a strong leadership group, built on solid relationships among advocates and state officials, that has made a special effort to focus on the importance of promoting healthy early relationships. Illinois’ success is based on public/private partnerships, strong advocacy, and state agencies working together to assure the service delivery system meets the needs of young children.

The focus on maternal depression builds on earlier work to promote healthy social and emotional development in young children, for example, by expanding access to early childhood mental health consultation and the Children’s Mental Health Partnership. The partnership brings together a broad-based strategy to address the mental health and social/emotional development of children and adolescents, including young children. Recognizing the importance of maternal depression and particularly its impact on infants and toddlers, Illinois has taken a number of steps across multiple agencies and communities to develop a “putting it all together” strategy. Largely driven through public-private collaborations, the work has grown out of the state’s Birth-to-Five early childhood systems development initiative, convened by Illinois’ Ounce of Prevention Fund and through state agency work to address the health needs of young children. The effort can be linked to the state’s ECCS grant work and the governor’s initiatives to improve health outcomes of children and assure they are ready to learn.

Efforts to assure the healthy mental development of young children are many:

- In July 2006, Governor Blagojevich implemented *All Kids*, which provides uninsured children access to comprehensive health care with a rich benefit package (similar to that under Medicaid EPSDT). In December 2007, FamilyCare eligibility (affordable coverage for parents and caretaker relatives) was raised to 400 percent of the poverty level, thereby assuring health benefits for many more Illinoisans.
 - To assure that beneficiaries have access to care and a “medical home,” the Illinois Department of Healthcare and Family Services (HFS), the single state agency responsible for the administration of Title XIX and Title XXI of the Social Security Act, FamilyCare, and the All Kids program, implemented a mandatory statewide Primary Care Case Management (PCCM) program, with a strong quality assurance process that includes ongoing tracking and monitoring. Feedback to providers on key indicators and ongoing provider training are among the strategies incorporated in the program.
 - HFS’ contract with its Managed Care Organizations (MCO) was strengthened to specifically require objective developmental screening of young children and perinatal depression screening, referral and treatment, with ongoing monitoring and tracking. Enrollment in an MCO is voluntary and available in seven counties, including Cook County.
- Public Act 93-0536 (305 ILCS 5/5-5.23) was passed with the goal of improving birth outcomes for over 80,000 babies whose births are covered each year by HFS. The law requires HFS to develop a plan to improve birth outcomes. Addressing perinatal depression is among the strategies outlined in the plan.⁸⁹
- Illinois participated in the ABCD II project with support from The Commonwealth Fund, the National Academy for State Health Policy, the Michael Reese Health Trust, The Chicago Community Trust, the Centers for Medicare & Medicaid Services, The Ounce of Prevention Fund, provider organizations (Illinois Chapter of the American Academy of Pediatrics and the Academy of Family Physicians) and many other partners.
- Public Act 095-0469, Perinatal Mental Health Disorders Prevention and Treatment Act, effective

January 1, 2008, was enacted to increase awareness and to promote early detection and treatment of perinatal depression.⁹⁰ This act requires that:

- Women and their families be educated about perinatal mental health disorders in the prenatal and hospital (labor/delivery) settings.
- Women be invited to complete a questionnaire to assess whether they suffer from perinatal mental health disorders in the prenatal, postnatal and pediatric care settings.

Under the authority of Public Act 93-0536, and through a collaborative effort involving public-private partnerships, including the state's human services agencies, the Conference of Women Legislators, the University of Illinois at Chicago Women's Mental Health Program, and private foundations, Illinois has developed a comprehensive perinatal depression initiative.

- Screening for perinatal depression using an approved instrument is a reimbursable service to HFS-enrolled providers, including community mental health centers, for screening HFS-enrolled women. Screening is reimbursed both prenatally and up to one year after delivery.
- The Perinatal Mental Health Consultation Service operated by the University of Illinois at Chicago (UIC) is available to HFS-enrolled providers for consultation on perinatal depression. The consultation service is toll-free, provides consultation to physicians by psychiatrists, and provides information about medications.
- A 24-hour crisis hotline operated by Evanston Northwestern Healthcare (ENH) Postpartum Depression Program is available to women experiencing perinatal depression. The hotline is staffed by trained mental health professionals. Callers receive psychosocial assessment by phone and are referred to local mental health providers.
- Referral and treatment resources are available statewide for referral of women who call the hotline.
- Provider education and training on the healthy development of young children, which includes addressing perinatal depression, is available from the Enhancing Developmentally Oriented Primary Care (EDOPC) program operated by Advocate Healthcare, the Illinois Chapter of the American Academy of Pediatrics and the Illinois Academy of Family

Physicians (web-based training), and the Mental Health Consultation Service.

- A major initiative was undertaken with the Chicago Department of Public Health to screen pregnant women for depression.
- The Illinois Department of Human Services has provided State Title V Maternal and Child Health Services Block Grant funding to support the state's perinatal depression initiative and promotes perinatal depression screening and developmental screening of young children in the public health sector.
- HFS provides support of provider training on perinatal depression, telephone consultation and referral coordination for its participants with support from private foundations and federal matching funds.

Perhaps most significantly, cross-agency, public-private collaboration has led to system-wide change at the fiscal, policy, and practice levels.

- HFS provides reimbursement for screening perinatal program participants and/or their infants who are enrolled in the program.
- The state has created the expectation through EPSDT that objective developmental screening will occur, at a minimum, annually from birth to age 3.
- Illinois has made it a priority to focus on promoting healthy social and emotional development in young children, including addressing mental health needs of their mothers to improve healthy early relationships.
- Infants and toddlers with a mother with a mental health illness diagnosis (including depression) are automatically eligible for the Early Intervention program.
- Screening and identification of mothers experiencing depression have increased in the HFS-enrolled population.
- An effort to cross-walk and implement DC-0-3 is under way.
- HFS began providing reimbursement for adult preventive care services effective July 1, 2007. In conjunction with this, an annual preconception visit will also be allowed. The coverage of routine preventive services and preconception/interconception care for women allows greater opportunity for screening for perinatal depression.

Innovative Coverage for Depression Screening

HFS-enrolled providers who provide primary care services can bill for maternal depression screening using an approved screening instrument (Edinburgh Postnatal Depression Scale, Beck Depression Inventory, or Primary Care Evaluation of Mental Disorders Patient Health Questionnaire, Postpartum Depression Screening Scale, Center for Epidemiologic Studies Depression Scale). The screenings can be performed as many times as necessary, up to one year after birth. Because of the potential negative impacts of maternal depression on children, the screening is covered as a “risk assessment” and can be completed during prenatal and postpartum visits, as well as during infant well-child and episodic visits. During the postpartum period, providers bill under the woman’s coverage, if she is covered by the HFS. For screenings that take place during a well-child or episodic visit, HFS will reimburse through the infant’s coverage. Encounter Rate Clinics, Federally Qualified Health Centers, and Rural Health Clinics do not receive reimbursement for screening because they are paid by encounter rate, which covers all services per visit. Once a woman is diagnosed with depression, HFS will reimburse for antidepressants or other pharmacological treatment for women covered under its medical programs.

To make these efforts work, there is close and frequent communication among a core group of leaders, which promotes leveraging of dollars toward achieving a common vision.

Federal Efforts

To date there has been a limited explicit federal response to maternal depression. At the agency level, over the past three years, in response to a Congressional appropriation, MCHB-HRSA has given 16 states one-year grants to promote awareness of and address perinatal depression.

- In Fiscal Years 2004 and 2005, 10 State MCH programs (AK, CT, DC, IL, IN, MD, MA, NE, NY, VA) received money to launch multilingual public education programs to promote mental wellness for mothers and families, and to increase public awareness and understanding of maternal depression to reduce stigma and encourage treatment. The initiative also required states to decrease barriers to care for low-income families.
- In 2006, the program awarded grants to six states (IL, IA, LA, KY, MA, PA) to provide comprehensive, coordinated services for maternal depression and other mental health problems during pregnancy and at least

Pending Federal Legislation as of Winter 2007

- The **Melanie Blocker-Stokes Postpartum Depression Research and Care Act** was passed by the House on October 15, 2007. Sponsored by Bobby Rush (IL), and cosponsored by 130 other Representatives, HR 20 will fund research, screening, treatment, and education for mothers with postpartum depression and psychosis, for fiscal years 2008-2010. The bill, first introduced in 2001, was passed by a vote of 382 to 3. It has been sent to the Senate.
- **Mom’s Opportunity to Access Health, Education, Research, and Support for Postpartum Depression Act (MOTHERS Act)**, was introduced by Senator Robert Menendez (NJ) and cosponsored by Barbara Boxer (CA), Sherrod Brown (OH), Christopher Dodd (CT), Richard Durbin (D-IL), Frank Lautenberg (NJ), Barack Obama (IL), Bernard Sanders (VT), Olympia J. Snowe (ME), and Sheldon Whitehouse (RI). This legislation would assist health care providers with education, identification, and treatment, and “ensure that new mothers and their families are educated about postpartum depression, screened for symptoms, and provided with essential services.”⁹¹ It also calls for increased research at the National Institutes of Health on postpartum depression treatments and diagnostic tools. The bill was introduced in June 2006, was reintroduced in May 2007, and was been referred to the Senate Committee on Health, Education, Labor, & Pensions. In the wake of the passing of the Melanie Blocker-Stokes Postpartum Depression Research and Care Act, postpartum depression advocates have been organizing for constituent support, including a national day of action to call senators and blog about the act.⁹²
- Previous House legislation passed in 2000, **House Resolution 163**, “expressing the sense of the House of Representatives with respect to postpartum depression” “encouraged” and “recommended” maternal depression screening, provider education, and public awareness, but did not mandate any actions.

Update: In November 2007, the House and Senate bills were combined and renamed as **The Melanie Blocker Stokes MOTHERS Act**. As of February, 2008, the Act is with the Senate Committee on Health, Education, Labor, and Pensions, awaiting mark up and presentation to the Senate during the next legislative session.

through the first year after pregnancy. In this program, maternal mental health services must be combined with services for infant mental health within a service system model that focuses care on the mother-infant pair.⁹³

While the first round of grants have been useful, states do not seem to be able to sustain the public awareness strategies.

There have also been efforts to introduce legislation to promote public awareness and a more coherent set of services for pre-natal depression. However, none has been successful. (See box.) Nor has there been any executive order or Congressional mandate to bring together health, mental health and child development agencies to maximize the impact of scattered research projects.

Recommendations

Addressing and targeting resources to maternal depression as a barrier to early healthy development and early school success is complex undertaking that will require the involvement of programs, community leaders, state policy-makers and legislators and families and researchers at local and state levels, as well as some national leadership. At the same time it is clear from this report that approaches are emerging, both at the practice level and the policy level. To move this agenda forward, below is a set of strategic actions for those at the local, state and federal levels.

At the local level, communities can:

- conduct a community scan to assess local capacity for screening and following-up for pregnant women and parents of babies and young children and to identify how existing resources are used;
- engage local funders, including community foundations, to develop a strategic plan and implementation steps to help local early childhood programs test and/or replicate evidence-based, effective family-focused practices to address maternal depression and its impact on young children (See Appendix for contacts for approaches mentioned in this issue brief.);
- assess and strengthen community capacity to address depression in fathers as well as mothers, and in others who care for young children on a daily basis, whether in families or in child care settings;
- engage leaders of low-income communities in designing and evaluating public awareness campaigns and culturally and linguistically responsive outreach and program strategies;
- document disparities and implement strategies to track and improve access to culturally and linguistically responsive instructions; and
- combine public and private dollars to support early childhood mental health consultants to work with home-visitors and other caregivers.

At the state level, public officials and advocates can:

- use ECCS grants to help health care providers and systems implement a developmental multi-generational family health/mental health perspective, including attention to prenatal depression and related risks as part of implementing the medical/dental home vision;
- dedicate a staff person to coordinating interagency screening, prevention and treatment efforts to address depression through a family lens, paralleling positions that have been created for to coordinate cross-agency activities around women's health or HIV/AIDS;
- develop a cross-agency strategic action plan to reduce maternal depression and its impact on young children that identifies what each system will do separately and together, such as:
 - build on medical home initiatives and perinatal screening initiatives, making sure there is appropriate follow-up treatment;
 - support cross-training efforts for primary care providers in health and early care and learning settings;
 - expand early childhood mental health strategies to include attention to depression in staff and families;
 - provide support to expand access to screening and follow-up treatment for pregnant and parenting mothers through both health practices and early childhood programs;
 - train and identify mental health consultants with documented expertise in dealing with depression through a family lens to work with pediatricians, early care and learning programs and women's health agencies; and
 - embed attention to depression *beyond* health and early childhood systems and programs (especially TANF, marriage initiatives, WIC, child welfare, etc.) in developing program initiatives, regulations, etc.
- Maximize the use of Medicaid to prevent and treat depression and related risk factors in the context of promoting healthy early child development, such as:
 - use Medicaid waivers (or if that is prohibited, state funds) to extend health insurance coverage to mothers with young children at least to the eligibility levels that the children are covered for

the first two years following birth or use the child's access to Medicaid to cover parents;

- promote public awareness campaigns and educational materials that show the links between early school success and addressing maternal depression.

At the federal level federal officials, including Congress can:

- ensure that Medicaid facilitates, rather than impedes, states' ability to pay for depression reduction and prevention strategies that are designed to improve outcomes for young children;
- provide incentives to the states to cover parents of young children through Medicaid up to 200 percent of the poverty level to ensure access to treatment for depression as well as health conditions that impair parenting;
- create a federal interagency work group, either through legislation or executive order, including health, mental health and children's agencies that can develop a strategic action plan, and potentially pool funds to support state efforts to design comprehensive approaches to prevent and reduce parental depression and improve outcomes in young children;
- embed attention to depression *beyond* health and early childhood systems and programs (especially TANF, marriage initiatives, child welfare, etc.) in developing program initiatives, regulations, etc.; and
- develop a strategic NIH research agenda that includes support to develop and test a range of interventions to address maternal depression, promote more effective parenting strategies and improve outcomes for young children, particularly for low-income women experiencing depression along with other risk factors.

Conclusion

This issue brief calls for policymakers to include much more serious attention to maternal depression as part of the larger efforts across the country to improve healthy developmental and school-readiness outcomes in young children.

The argument is simple: particularly for low-income children, maternal depression is a known barrier to ensuring that young children experience the kinds of relationships that will facilitate their success in the early school years. Investing in treatment and support for one generation will promote healthy development and school readiness for the next. Addressing maternal depression through a parenting and early childhood lens is in effect a “two-fer”: it can help parents, but importantly, it will also pay off for their children, both in the short term and in the longer term. There are tough barriers, particularly fiscal barriers, to creating family-focused interventions. It requires a framework shift that provides public incentives for a family-focused, namely multi-generational, culturally responsive, approach that brings together resources from multiple public systems. There is also a critical role as a catalyst and seeder of initiatives for private philanthropy.

The real message from this brief is clear. While there is much more to be known, we already have enough evidence about effective approaches to address a damaging condition that ripples throughout a family and a community, with lifelong implications for everyone it touches. We simply cannot afford not to respond with resources and commitment.

Endnotes

1. Putnam, Frank. Reducing Maternal Depression and Its Impact on Young Children: Building a Policy Framework. Policy Roundtable. June 22, 2006. New York NY: National Center for Children in Poverty.
2. Ibid.
3. Gaynes, B. N.; Gavin, N.; Meltzer-Brody, S.; Lohr, K. N.; Swinson, T.; Gartlehner, G.; Brody, S.; Miller, W. C. 2005. *Perinatal Depression: Prevalence, Screening Accuracy, and Screening Outcomes*. Rockville, MD: Prepared by the RTI-University of North Carolina Evidence-based Practice Center, under Contract No. 290-02-0016.
- Isaacs, Maresa. 2004. *Community Care Networks for Depression in Low-Income Communities and Communities of Color: A Review of the Literature*. Submitted to Annie E. Casey Foundation. Washington, DC: Howard University School of Social Work and the National Alliance of Multiethnic Behavioral Health Associations (NAMBHA).
- Roca, Catherine. National Institute of Mental Health. 2007. Personal communication.
4. Isaacs, Maresa. 2004. *Community Care Networks for Depression in Low-Income Communities and Communities of Color: A Review of the Literature*. Submitted to Annie E. Casey Foundation. Washington, DC: Howard University School of Social Work and the National Alliance of Multiethnic Behavioral Health Associations (NAMBHA).
5. Ibid.
6. Ibid.
7. Ibid.
8. Lanzi, R. G.; Pascoe, J. M.; Keltner, B.; Ramey, S. L. 1999. Correlates of Maternal Depressive Symptoms in a National Head Start Program Sample. *Archives of Pediatric Adolescent Medicine* 153(8): 801-807.
- Miranda, Jeanne; Green, Bonnie L. 1999. The Need for Mental Health Services Research Focusing on Poor Young Women. *The Journal of Mental Health Policy and Economics* 2(2): 73-80.
- Onunaku, Ngozi. 2005. *Improving Maternal and Infant Mental Health: Focus on Maternal Depression*. National Center for Infant and Early Childhood Health Policy at UCLA.
- Riley, A. W.; Broitman, M. 2003. *The Effects of Maternal Depression on the School Readiness of Low-Income Children*. Baltimore, MD: Report for the Annie E. Casey Foundation, Johns Hopkins Bloomberg School of Public Health.
- Siefert, K.; Bowman, P. J.; Heflin, C. M.; Danziger, S.; Williams, D. R. 2000. Social and Environmental Predictors of Maternal Depression in Current and Recent Welfare Recipients. *American Journal of Orthopsychiatry* 70(4): 510-522.
9. Gaynes, B. N.; Gavin, N.; Meltzer-Brody, S.; Lohr, K. N.; Swinson, T.; Gartlehner, G.; Brody, S.; Miller, W. C. 2005. *Perinatal Depression: Prevalence, Screening Accuracy, and Screening Outcomes*. Rockville, MD: Prepared by the RTI-University of North Carolina Evidence-based Practice Center, under Contract No. 290-02-0016.
10. *Research to Practice: Depression in the Lives of Early Head Start Families*. April 2006. Administration for Children and Families, U.S. Department of Health and Human Services.
11. Kahn, Robert S.; Wise, Paul H.; Finkelstein, Jonathan A.; Bernstein, Henry H.; Lowe, Janice A.; Homer, Charles J. 1999. The Scope of Unmet Maternal Health Needs in Pediatric Settings. *Pediatrics* 103(3): 576-581.
12. Siefert, K.; Bowman, P. J.; Heflin, C. M.; Danziger, S.; Williams, D. R. 2000. Social and Environmental Predictors of Maternal Depression in Current and Recent Welfare Recipients. *American Journal of Orthopsychiatry* 70(4): 510-522.
13. Isaacs, Maresa. 2004. *Community Care Networks for Depression in Low-Income Communities and Communities of Color: A Review of the Literature*. Submitted to Annie E. Casey Foundation. Washington, DC: Howard University School of Social Work and the National Alliance of Multiethnic Behavioral Health Associations (NAMBHA).
14. Isaacs, Maresa R. 2006. *Maternal Depression: The Silent Epidemic in Poor Communities*. Baltimore: MD: Annie E. Casey Foundation.
15. Belle, Deborah; Doucet, Joanne. 2003. Poverty, Inequality, and Discrimination as Sources of Depression Among U.S. Women. *Psychology of Women Quarterly* 27(2): 101-113.
- Hobfoll, Stevan E.; Ritter, Christian; Lavin, Justin; Hulsizer, Michael R.; Cameron, Rebecca P. 1995. Depression Prevalence and Incidence Among Inner-City Pregnant and Postpartum Women. *Journal of Consulting and Clinical Psychology* 63(3): 445-453.
- Richardson, Phil. 2002. *Depression and Other Mental Health Barriers Among Welfare Recipients – Results from Three States*. Reston, VA: Maximus.
16. Hobfoll, Stevan E.; Ritter, Christian; Lavin, Justin; Hulsizer, Michael R.; Cameron, Rebecca P. 1995. Depression Prevalence and Incidence Among Inner-City Pregnant and Postpartum Women. *Journal of Consulting and Clinical Psychology* 63(3): 445-453.
17. Essex, Marilyn J.; Klein, Marjorie H.; Miech, Richard; Smider, Nancy A. 2001. Timing of Initial Exposure to Maternal Major Depression and Children's Mental Health Symptoms in Kindergarten. *British Journal of Psychiatry* 179(2): 151-156.
- Hammen, Constance; Brennan, Patricia A. 2003. Severity, Chronicity, and Timing of Maternal Depression and Risk for Adolescent Offspring Diagnoses in a Community Sample. *Archives of General Psychiatry* 60(3): 253-258.
18. For more detailed syntheses of research see Bonari, Lori; Pinto, Natasha; Ahn, Eric; Einarson, Adrienne; Steiner, Meir; Koren, Gideon. 2004. Perinatal Risks of Untreated Depression During Pregnancy. *Canadian Journal of Psychiatry* 49(11): 726-735.
19. Neggers, Yasmin; Goldenberg, Robert; Cliver, Suzanne; Hauth, John. 2006. The Relationship between Psychosocial Profile, Health Practices, and Pregnancy Outcomes. *Acta Obstetrica et Gynecologica Scandinavica* 85(3): 277-285.
20. Isaacs, Maresa. 2004. *Community Care Networks for Depression in Low-Income Communities and Communities of Color: A Review of the Literature*. Submitted to Annie E. Casey Foundation. Washington, DC: Howard University School of Social Work and the National Alliance of Multiethnic Behavioral Health Associations (NAMBHA).
21. Ashman, Sharon B.; Dawson, Geraldine; Panagiotides, Heracles; Yamada, Emily; Wilkinson, Charles W. 2002. Stress Hormone Levels of Children of Depressed Mothers. *Development and Psychopathology* 14(2): 333-349.
- Essex, Marilyn J.; Klein, Marjorie H.; Cho, Eunsuk; Kalin, Ned H. 2002. Maternal Stress Beginning in Infancy May Sensitize Children to Later Stress Exposure: Effects on Cortisol and Behavior. *Biological Psychiatry* 52(8): 776-784.
22. Huang, Larke N.; Freed, Rachel. 2006. *The Spiraling Effects of Maternal Depression on Mothers, Children, Families and Communities*. Issue Brief #2. Annie E. Casey Foundation.
- Lyons-Ruth, K.; Connell, D. B.; Grunebaum, H. U.; Botein, S. 1990. Infants at Social Risk: Maternal Depression and Family Support Services as Mediators of Infant Development and Security of Attachment. *Child Development* 61(1): 85-98.
23. NICHD Early Child Care Research Network. 1999. Chronicity of Maternal Depressive Symptoms, Maternal Sensitivity, and Child Functioning at 36 Months. *Developmental Psychology* 35(5): 1297-1310.

24. Huang, Larke N.; Freed, Rachel. 2006. *The Spiraling Effects of Maternal Depression on Mothers, Children, Families and Communities*. Issue Brief #2. Annie E. Casey Foundation.
- Paulson, James F.; Dauber, Sarah; Leiferman, Jenn A. 2006. Individual and Combined Effects of Postpartum Depression in Mothers and Fathers on Parenting Behavior. *Pediatrics* 118(2): 659-668.
25. Beardslee, W. R.; Bemporad, J.; Keller, M. B.; Klerman, G. L. 1983. Children of Parents with Major Affective Disorder: A Review. *American Journal of Psychiatry* 140(7): 825-832.
- Essex, Marilyn J.; Klein, Marjorie H.; Miech, Richard; Smider, Nancy A. 2001. Timing of Initial Exposure to Maternal Major Depression and Children's Mental Health Symptoms in Kindergarten. *British Journal of Psychiatry* 179(2): 151-156.
26. Henderson, Jennifer J.; Evans, Sharon F.; Straton, Judith A. Y.; Priest, Susan R.; Hagan, Ronald. 2003. Impact of Postnatal Depression on Breastfeeding Duration. *Birth* 30(3): 175-180.
- Paulson, James F.; Dauber, Sarah; Leiferman, Jenn A. 2006. Individual and Combined Effects of Postpartum Depression in Mothers and Fathers on Parenting Behavior. *Pediatrics* 118(2): 659-668.
27. Chung, Esther K.; McCollum, Kelly F.; Elo, Irma T.; Lee, Helen J.; Culhane, Jennifer F. 2004. Maternal Depressive Symptoms and Infant Health Practices among Low-Income Women. *Pediatrics* 113(6): 523-529.
- Kavanaugh, Megan; Halterman, Jill S.; Montes, Guillermo; Epstein, Mike; Hightower, A. Dirk; Weitzman, Michael. 2006. Maternal Depressive Symptoms Are Adversely Associated with Prevention Practices and Parenting Behaviors for Preschool Children. *Ambulatory Pediatrics* 6(1): 32-37.
- McLennan, John D.; Kotelchuck, Milton. 2000. Parental Prevention Practices for Young Children in the Context of Maternal Depression. *Pediatrics* 105(5): 1090-1095.
- Paulson, James F.; Dauber, Sarah; Leiferman, Jenn A. 2006. Individual and Combined Effects of Postpartum Depression in Mothers and Fathers on Parenting Behavior. *Pediatrics* 118(2): 659-668.
28. Huang, Larke N.; Freed, Rachel. 2006. *The Spiraling Effects of Maternal Depression on Mothers, Children, Families and Communities*. Issue Brief #2. Annie E. Casey Foundation.
- Kavanaugh, Megan; Halterman, Jill S.; Montes, Guillermo; Epstein, Mike; Hightower, A. Dirk; Weitzman, Michael. 2006. Maternal Depressive Symptoms Are Adversely Associated with Prevention Practices and Parenting Behaviors for Preschool Children. *Ambulatory Pediatrics* 6(1):32-37.
- Sills, Marion R.; Shetterly, Susan; Xu, Stanley; Magid, David; Kempe, Allison. 2007. Association between Parental Depression and Children's Health Care Use. *Pediatrics* 119(4): 829-836.
29. Whitaker, Robert C.; Orzol, Sean M.; Kahn, Robert S. 2006. Maternal Mental Health, Substance Use, and Domestic Violence in the Year after Delivery and Subsequent Behavior Problems in Children at Age 3 Years. *Archives of General Psychiatry* 63(5): 551-560.
30. Ibid.
31. Isaacs, Maresa R. 2006. *Maternal Depression: The Silent Epidemic in Poor Communities*. Baltimore, MD: Annie E. Casey Foundation.
32. Goodman, Janice H. 2004. Paternal Postpartum Depression, Its Relationship to Maternal Postpartum Depression, and Implications for Family Health. *Journal of Advanced Nursing* 45(1): 26-35.
33. *Research to Practice: Depression in the Lives of Early Head Start Families*. April 2006. Administration for Children and Families, U.S. Department of Health and Human Services.
34. Goodman, Janice H. 2004. Paternal Postpartum Depression, Its Relationship to Maternal Postpartum Depression, and Implications for Family Health. *Journal of Advanced Nursing* 45(1): 26-35.
35. Kahn, Robert S.; Brandt, Dominique; Whitaker, Robert C. 2004. Combined Effect of Mothers' and Fathers' Mental Health Symptoms on Children's Behavioral and Emotional Well-Being. *Archives of Pediatric & Adolescent Medicine* 158(8): 721-729.
- Paulson, James F.; Dauber, Sarah; Leiferman, Jenn A. 2006. Individual and Combined Effects of Postpartum Depression in Mothers and Fathers on Parenting Behavior. *Pediatrics* 118(2): 659-668.
- Ramchandani, Paul; Stein, Alan; Evans, Jonathan; O'Connor, Thomas G. 2005. Paternal Depression in the Postnatal Period and Child Development: A Prospective Population Study. *Lancet* 365(9478): 2201-2205.
36. O'Brien, R. W.; D'Elia, M. A.; Vaden-Kiernan, M.; Magee, C.; Younoszai, T.; Keane, M. J.; Connell, D. C.; Hailey, L. 2002. *A Descriptive Study of Head Start Families: Faces Technical Report I*. Washington, DC: U.S. Administration on Children, Youth, and Families. Department of Health and Human Services.
37. Smithgall, Cheryl; Mason, Sally; Michels, Lisa; Licalsi, Christina; Goerge, Robert. 2006. *Caring for Their Children's Children: Assessing the Mental Health Needs and Service Experiences of Grandparent Caregiver Families*. Chapin Hall Center for Children at the University of Chicago.
38. Whitebook, Marcy; Phillips, Deborah; Bellm, Dan; Crowell, Nancy; Almaraz, Mirella; Jo, Joon Yong. 2004. *Two Years in Early Care and Education: A Community Portrait of Quality and Workforce Stability*. Center for the Study of Child Care Employment, University of California at Berkeley.
39. Ibid.
40. Hamre, Bridget K.; Pianta, Robert C. 2004. Self-Reported Depression in Nonfamilial Caregivers: Prevalence and Associations with Caregiver Behavior in Child-Care Settings. *Early Childhood Research Quarterly* 19(2): 297-318.
41. Gilliam, Walter S.; Shabar, Golan. 2006. Preschool and Child Care Expulsion and Suspension: Rates and Predictors in One State. *Infants & Young Children: An Interdisciplinary Journal of Special Care Practices* 19(3): 228-245.
42. Miranda, Jeanne; Chung, Joyce Y.; Green, Bonnie L.; Krupnick, Janice; Siddique, Juned; Revicki, Dennis A.; Belin, Tom. 2003. Treating Depression in Predominantly Low-Income Young Minority Women: A Randomized Controlled Trial. *JAMA* 290(1): 57-65.
- Perry, Deborah F. 2006. *What Works in Preventing and Treating Maternal Depression in Low-Income Communities of Color*. Issue Brief #3. Annie E. Casey Foundation.
43. Isaacs, Maresa. 2004. *Community Care Networks for Depression in Low-Income Communities and Communities of Color: A Review of the Literature*. Submitted to Annie E. Casey Foundation. Washington, DC: Howard University School of Social Work and the National Alliance of Multiethnic Behavioral Health Associations (NAMBHA).
44. Knitzer, Jane. 2000. *Promoting Resilience: Helping Young Children and Parents Affected by Substance Abuse, Domestic Violence, and Depression in the Context of Welfare Reform*. New York, NY: National Center for Children in Poverty, Mailman School of Public Health, Columbia University.
45. Beardslee, William R. Reducing Maternal Depression and Its Impact on Young Children: Building a Policy Framework. Policy Roundtable. June 22, 2006. New York NY: National Center for Children in Poverty.
46. Isaacs, Maresa. 2004. *Community Care Networks for Depression in Low-Income Communities and Communities of Color: A Review of the Literature*. Submitted to Annie E. Casey Foundation. Washington, DC: Howard University School of Social Work and the National Alliance of Multiethnic Behavioral Health Associations (NAMBHA).

47. Isaacs, Maresa. 2004. *Community Care Networks for Depression in Low-Income Communities and Communities of Color: A Review of the Literature*. Submitted to Annie E. Casey Foundation. Washington, DC: Howard University School of Social Work and the National Alliance of Multiethnic Behavioral Health Associations (NAMBHA).
48. Brown, C.; Palenchar, D. R. 2004. Treatment of Depression in African American Primary Care Patients. *Perspectives* 55-65.
- Miranda, Jeanne; Chung, Joyce Y.; Green, Bonnie L.; Krupnick, Janice; Siddique, Juned; Revicki, Dennis A.; Belin, Tom. 2003. Treating Depression in Predominantly Low-Income Young Minority Women: A Randomized Controlled Trial. *JAMA* 290(1): 57-65.
- Miranda, Jeanne; Duan, Naihua; Sherbourne, Cathy; Schoenbaum, Michael; Lagomasino, Isabel; Jackson-Triche, Maga; Wells, Kenneth B. 2003. Improving Care for Minorities: Can Quality Improvement Interventions Improve Care and Outcomes for Depressed Minorities? Results of a Randomized, Controlled Trial. *Health Services Research* 38(2): 613-630.
- Miranda, Jeanne; Green, Bonnie L. 1999. The Need for Mental Health Services Research Focusing on Poor Young Women. *The Journal of Mental Health Policy and Economics* 2(2): 73-80.
49. Stebbins, Helene; Knitzer, Jane. 2007. *Highlights from the Improving the Odds for Young Children Project: State Early Childhood Policies*. New York, NY: National Center for Children in Poverty, Mailman School of Public Health, Columbia University.
50. Isaacs, Maresa. 2004. *Community Care Networks for Depression in Low-Income Communities and Communities of Color: A Review of the Literature*. Submitted to Annie E. Casey Foundation. Washington, DC: Howard University School of Social Work and the National Alliance of Multiethnic Behavioral Health Associations (NAMBHA). p. 36 (Adapted with permission from the author).
51. Depression and Bipolar Support Alliance. 2006. *The State of Depression in America*. Chicago: Depression and Bipolar Support Alliance.
52. Richardson, Phil. 2002. *Depression and Other Mental Health Barriers Among Welfare Recipients – Results from Three States*. Reston, VA: Maximus.
53. Isaacs, Maresa. 2004. *Community Care Networks for Depression in Low-Income Communities and Communities of Color: A Review of the Literature*. Submitted to Annie E. Casey Foundation. Washington, DC: Howard University School of Social Work and the National Alliance of Multiethnic Behavioral Health Associations (NAMBHA).
54. Lennon, Mary Clare; Blome, Juliana; English, Kevin. 2001. *Depression and Low-Income Women: Challenges for TANF and Welfare-to-Work Policies and Programs*. New York, NY: Research Forum on Children, Families and the New Federalism, National Center for Children in Poverty.
55. Earls, Marian. Reducing Maternal Depression and Its Impact on Young Children: Building a Policy Framework. Policy Roundtable. June 22, 2006. New York NY: National Center for Children in Poverty.
56. Beardslee, William R.; Gladstone, Tracy R. G.; Wright, Ellen J.; Cooper, Andrew B. 2003. A Family-Based Approach to the Prevention of Depressive Symptoms in Children at Risk: Evidence of Parental and Child Change. *Pediatrics* 112(2): 119-131.
- Beardslee, William R.; Knitzer, Jane. 2003. *Strengths-Based Family Mental Health Services: A Family Systems Approach*. American Psychological Association.
57. Isaacs, Maresa. 2004. *Community Care Networks for Depression in Low-Income Communities and Communities of Color: A Review of the Literature*. Submitted to Annie E. Casey Foundation. Washington, DC: Howard University School of Social Work and the National Alliance of Multiethnic Behavioral Health Associations (NAMBHA).
58. ACOG Committee Opinion No. 343: Psychosocial Risk Factors: Perinatal Screening and Intervention. 2006. *Obstetrics & Gynecology* 108(2): 469.
59. Olson, Ardis L.; Dietrich, Allen J.; Prazar, Gregory; Hurley, James; Tuddenham, Ann; Hedberg, Viking; Naspinsky, Deborah A. 2005. Two Approaches to Maternal Depression Screening During Well Child Visits. *Journal of Developmental and Behavioral Pediatrics* 26(3): 169-176.
60. Ibid.
- Olson, Ardis L.; Dietrich, Allen J.; Prazar, Greg; Hurley, James. 2006. Brief Maternal Depression Screening at Well-Child Visits. *Pediatrics* 118(1): 207-216.
61. ACOG Committee Opinion No. 343: Psychosocial Risk Factors: Perinatal Screening and Intervention. 2006. *Obstetrics & Gynecology* 108(2): 469.
62. Olson, Ardis L.; Dietrich, Allen J.; Prazar, Gregory; Hurley, James; Tuddenham, Ann; Hedberg, Viking; Naspinsky, Deborah A. 2005. Two Approaches to Maternal Depression Screening During Well Child Visits. *Journal of Developmental and Behavioral Pediatrics* 26(3): 169-176.
63. Earls, Marian F.; Hay, Sherry Shackelford. 2006. Setting the Stage for Success: Implementation of Developmental and Behavioral Screening and Surveillance in Primary Care Practice - the North Carolina Assuring Better Child Health and Development (ABCD) Project. *Pediatrics* 118(1): 183-188.
64. Smith, Gwen. January, 9, 2008. Illinois Bureau of Maternal and Child Health Promotion. Personal communication
65. *Maternity Care Coalition: Programs*. Retrieved Aug. 21, 2007, from <www.momobile.org/programs/momobile.html>.
66. Chazan-Cohen, Rachel; Ayoub, Catherine; Alexander Pan, Barbara; Roggman, Lori; Raikes, Helen; Mckelvey, Lorraine; Whiteside-Mansell, Leanne; Hart, Andrea. 2007. It Takes Time: Impacts of Early Head Start That Lead to Reductions in Maternal Depression Two Years Later. *Infant Mental Health Journal* 28(2): 151-170.
- Research to Practice: Depression in the Lives of Early Head Start Families*. April 2006. Administration for Children and Families, U.S. Department of Health and Human Services.
67. Chazan-Cohen, Rachel; Ayoub, Catherine; Alexander Pan, Barbara; Roggman, Lori; Raikes, Helen; Mckelvey, Lorraine; Whiteside-Mansell, Leanne; Hart, Andrea. 2007. It Takes Time: Impacts of Early Head Start That Lead to Reductions in Maternal Depression Two Years Later. *Infant Mental Health Journal* 28(2): 151-170.
68. Ibid.
69. For other strategies see Knitzer, Jane; Lefkowitz, Jill. 2006. *Pathways to Early School Success: Helping the Most Vulnerable Infants, Toddlers, and Their Families*. New York, NY: National Center for Children in Poverty, Mailman School of Public Health, Columbia University.
70. Podorefsky, McDonald-Dowdell; Beardslee, William R. 2001. Adaptation of Preventive Interventions for a Low-Income, Culturally Diverse Community. *Journal of the American Academy of Child & Adolescent Psychiatry*. 40(8): 879-886.
71. Ayoub, Catherine. Family Connections. Nov. 12, 2007. Personal communication.
72. Ammerman, R. T.; Putnam, F. W.; Stevens, J., Holleb, L. J.; Novak, A. L.; Van Ginkel, J. B. 2005. In-Home Cognitive Behavior Therapy for Depression: An Adapted Treatment for First-Time Mothers in Home Visitation. *Best Practices In Mental Health* 1(1): 1-14.
73. *Every Child Succeeds: Evaluation and Outcomes*. Retrieved Nov. 1, 2007, from <www.everychildsucceds.org/default.asp?category=6>.

74. *Every Child Succeeds: Overview*. Cincinnati Children's Hospital Medical Center. Retrieved Nov. 21, 2007, from <www.cincinnatichildrens.org/svc/alpha/e/every-child/default.htm>.
75. Isaacs, Maresa. 2004. *Community Care Networks for Depression in Low-Income Communities and Communities of Color: A Review of the Literature*. Submitted to Annie E. Casey Foundation. Washington, DC: Howard University School of Social Work and the National Alliance of Multiethnic Behavioral Health Associations (NAMBHA).
76. Ibid.
77. *Caribbean Women's Health Association: Programs*. Retrieved Nov. 9, 2007, from <www.cwha.org/HTML/programs.html>.
78. Perry, Deborah F. 2006. *What Works in Preventing and Treating Maternal Depression in Low-Income Communities of Color*. Issue Brief #3. Annie E. Casey Foundation.
79. Boris, Neil W.; Larrieu, Julie A.; Zeanah, Paula D.; Nagle, Geoffrey A.; Steier, Alison; McNeill, Patricia. 2006. The Process and Promise of Mental Health Augmentation of Nurse Home-Visiting Programs: Data from the Louisiana Nurse-Family Partnership. *Infant Mental Health Journal* 27(1): 26-40.
80. *The Assuring Better Child Health and Development Program*. Retrieved Oct. 29, 2007, from <http://nashp.org/_catdisp_page.cfm?LID=2A78988D-5310-11D6-BCF000A0CC558925>.
81. Earls, Marian F.; Hay, Sherry Shackelford. 2006. Setting the Stage for Success: Implementation of Developmental and Behavioral Screening and Surveillance in Primary Care Practice – the North Carolina Assuring Better Child Health and Development (ABCD) Project. *Pediatrics* 118(1): 183-188.
82. Earls, Marian. Reducing Maternal Depression and Its Impact on Young Children: Building a Policy Framework. Policy Roundtable. June 22, 2006. New York NY: National Center for Children in Poverty.
83. *S.F. 2278: Postpartum Depression Education and Information Legislation*. 2005-2006. Minnesota State Legislature, 84th Legislative Session 2005-2006.
84. *S213: Postpartum Depression Law*. 2006. Senate, State of New Jersey, 212th Legislature. Allan, Diane B.; Codey, Richard J.
85. *About the Washington State Postpartum Depression (PPD) Awareness Campaign*. Retrieved Oct. 29, 2007, from <www.wcpca.wa.gov/ppd/aboutus_campaign.htm>.
86. Jamieson, Chris. Speak Up When You're Down Campaign, Children's Trust of Washington. Sept. 12, 2007. Personal communication.
87. *Iowa Early Childhood Comprehensive Systems Implementation Project: Progress Report and Project Plan for Continuation*. 2007. Iowa Department of Public Health.
88. *Successful Start Program Narrative, Rhode Island Early Childhood Comprehensive Systems Initiative Plan*. 2007. Providence, RI: Rhode Island Department of Health.
89. The original report and subsequent updates can be viewed at: <www.hfs.illinois.gov/mch/report.html>.
90. PA 95-0469 can be found at: <www.hfs.illinois.gov/mch/pq0469.html>.
91. *S 3529 IS: Mom's Opportunity to Access Health, Education, Research, and Support for Postpartum Depression Act*. 2006. Senate of the United States, 109th Congress, 2nd Session. Menendez, Robert.
92. *Take Action: Blog Day for Mothers Act*. Retrieved Oct. 29, 2007, from <www.postpartum.net/take-action.html>.
- Take Action: Blog Day for Mothers Act*. Retrieved Oct. 29, 2007, from <www.blogher.org/help-mothers-everywhere-join-blog-day-mothers-act-october-24th>.
93. *Division of Healthy Start and Perinatal Services: Perinatal Depression*. Retrieved Oct. 29, 2007, from <<http://mchb.hrsa.gov/about/dhsp.htm>>.

Appendix 1: Participant List

Project THRIVE Policy Roundtable
Reducing Maternal Depression and Its Impact on Young Children: Building a Policy Framework
June 22, 2006

MaryLee Allen, MSW
Director, Child Welfare and Mental Health Division
Children's Defense Fund

William R. Beardslee, MD
Academic Chair, Department of Psychiatry
Children's Hospital Boston
Gardner/Monks Professor of Child Psychiatry
Harvard Medical School

Blythe Berger, ScD
Chief of Early Childhood Policies and Programs
Rhode Island Department of Health

Joan M. Blough, LMSW
Technical Assistance Manager & ECCS Project Coordinator
Early Childhood Investment Corporation
Michigan

Patrick Chaulk, MD
Senior Associate
Annie E. Casey Foundation

Leslie L Davidson, MD, MSc
Senior Health Advisor, Project THRIVE
Professor of Clinical Population and Family Health
Director, Center for Child and Family Life Epidemiology
Department of Epidemiology
Mailman School of Public Health, Columbia University

Marian Earls, MD, FAAP
Medical Director
Guilford Child Health, Inc.
Greensboro, NC

Glenace Edwall, PsyD, PhD, LP, MPP
Director, Children's Mental Health Division
Minnesota Department of Human Services

Beverly English, RN, CNA, BC, MS
Bureau Chief
Division of Community Health and Prevention
Illinois Department of Human Services

Lisa Feldstein
Executive Assistant
National Center for Children in Poverty
Mailman School of Public Health, Columbia University

Norma I. Gavin, PhD
Senior Research Economist
RTI International

Mareasa R. Isaacs, PhD
Executive Director
National Alliance of Multi-Ethnic Behavioral Health Associations

Kay Johnson, MPH, EdM
Director, Project THRIVE
Johnson Group Consulting, Inc.

Jane Knitzer, EdD
Director
National Center for Children in Poverty
Mailman School of Public Health, Columbia University

Christopher A. Kus, MD, MPH
Pediatric Director, Division of Family Health
New York State Department of Health

Dedra Jones Markovich, MA
Birth to Five Project Director
Assistant Director, Kids PEPP
The Ounce of Prevention Fund

Joanne Martin, DrPH, RN, FAAN
Director, Maternity Outreach and Mobilization Project
Director, Institute for Action Research in Community Health
Director, Healthy Families Indiana Training and Technical Assistance Project
Indiana University School of Nursing

Laura J. Miller, MD
Professor of Psychiatry
Director, Women's Mental Health Program
Department of Psychiatry
University of Illinois at Chicago

Geoffrey Nagle, PhD, MPH, LCSW
Director
Institute of Infant and Early Childhood Mental Health
Assistant Professor of Clinical Psychiatry
Department of Psychiatry and Neurology
Tulane University School of Medicine

Deborah F. Perry, PhD
Director of Research
Center for Child and Human Development
Research Assistant Professor, Department of Pediatrics
Georgetown University

Theodora Pinnock, MD
District State Director, Maternal and Child Health
Tennessee Department of Health

Frank W. Putnam, MD
Professor of Pediatrics and Psychiatry
Cincinnati Children's Hospital Medical Center
University of Cincinnati College of Medicine

Dayana Rocha, MEd
Head Start Fellow/Disabilities Specialist
Office of Head Start
Administration for Children and Families
U.S. Department of Health and Human Services

Terrie Rose, PhD, LP
Founder and Executive Director
Baby's Space: A Place to Grow

Elisa Rosman, PhD
Consultant

Deborah Saunders, MSW
Bureau Chief
Bureau of Maternal and Child Health Promotion
Illinois Healthcare and Family Services

Phyllis Stubbs-Wynn, MD, MPH
Senior Medical Advisor
Maternal and Child Health Bureau
U.S. Department of Health and Human Services
Health Resources and Services Administration

Suzanne C. Theberge, MPH
Project Coordinator, Project THRIVE
National Center for Children in Poverty
Mailman School of Public Health, Columbia University

Joan Yengo
Vice President for Programs
Mary's Center for Maternal and Child Care, Inc.
Healthy Families DC

Mary Zoller, MPA
Project Manager, Three P's of Perinatal Depression Project
Policy Analyst
Division of Women's and Infants' Health
Virginia Department of Health

Appendix 2: Contact Information for Programs and Resources

FAMILY RESOURCES

Community Mom's Program: Brooklyn, NY

In New York City, the Caribbean Women's Health Association organizes the Community Mom's Program, a program for immigrant women who are pregnant and parenting children birth to age two.

Website: www.cwha.org

Main Office

21 Snyder Avenue, 2nd Floor
Brooklyn, NY 11226
Phone: (718) 826-2942

Women, Infants & Children (WIC) Program
3512 Church Avenue
Brooklyn, NY 11203
Phone: (718) 940-9501

CWHA Community Service Center of Far Rockaway
1931 Mott Avenue, Room 303
Far Rockaway, NY 11691
Phone: (718) 868-4746

The Caribbean-American Family Health Center
3414 Church Avenue
Brooklyn, NY 11203
Phone: (718) 940-4949

Consumer Parents Support Network: Passaic County, New Jersey

The Consumer Parents Support Network works with families in which a parent is mentally ill to promote the healthy functioning of the family unit and to support parenting efforts. The voluntary, fully bilingual (English and Spanish) program works to support healthy family functioning by providing parent education and family support, assistance with accessing care and services, peer support services, case management, crisis management, and other essential interventions for mentally ill parents with children under 18.

Mental Health Association in Passaic County (MHAPC)
404 Clifton Avenue
Clifton, NJ 07011
Phone: (973) 478-4444
Email: info@mhapc.com
Website: www.mhapc.com/programs.htm

Early Head Start: National

Early Head Start is a national comprehensive family support and child development program targeted to poor families who are pregnant or who have babies and toddlers.

Head Start program locator:
<http://eclkc.ohs.acf.hhs.gov/hslc/HeadStartOffices>
Email: askus@headstartinfo.org
Phone: (866) 763-6481 (Mon-Fri, 7:30 am-6:00 pm, Eastern Time)

Evanston Northwestern Healthcare (ENH) Postpartum Depression Program: Illinois

A 24-hour crisis hotline operated by Evanston Northwestern Healthcare (ENH) Postpartum Depression Program is available to women experiencing perinatal depression. The hotline is staffed by trained mental health professionals. Callers receive psychosocial assessment by phone and are referred to local mental health providers.

Referral and treatment resources are available on a statewide basis for referral of women who call the hotline.

Phone: (866) ENH-MOMS (364-6667)

Every Child Succeeds: Cincinnati, OH

Recognizing that the challenges of helping depressed moms cuts across different home-visiting models, Every Child Succeeds has developed an approach that embeds cognitive behavioral therapy into three different home visiting models.

Cincinnati Children's Hospital Medical Center
Every Child Succeeds
3333 Burnet Avenue, SEB-5
Cincinnati, OH 45229-3039
Phone: (513) 636-2830
Email: everychildsucceeds@chmcc.org
Website: www.cincinnatichildrens.org/svc/alpha/e/every-child

MOMobile: Pennsylvania

The MOMobile program, based in eight sites in southeastern Pennsylvania, under the auspices of the Maternity Care Coalition, sends community health workers around neighborhoods to support pregnant women, new parents, and families with infants. The advocates link families with services and supports, provide parenting education, provide service referrals, and distribute baby supplies and food in emergency situations.

Main Office Address: (multiple sites throughout Pennsylvania)
2000 Hamilton Street, Suite 205
Philadelphia, PA 19130
Phone: (215) 972-0700
Email: mcc@MOMobile.org
Website: www.momobile.org

ROAD: Reaching Out About Depression: Cambridge, MA

ROAD, based in Cambridge, MA, works with depressed low-income women who are transitioning from welfare to work. The group was developed by community members and has grown organically over time.

Phone: (617) 591-6909
E-mail: lmcmaster@challiance.org
Website: www.roadcambridge.org

Speak Up When You're Down in Washington State: Washington

Washington State funds a public awareness campaign to educate women and their families about the symptoms and treatment of postpartum depression. The Speak Up When You're Down campaign is led by the Washington Council for Prevention of Child Abuse and Neglect, along with partner organizations, including community members, educational institutions, and professional organizations in Washington State. The campaign, which started in 2005 through the HRSA grants, provides educational materials and runs a warm line for mothers suffering from post partum depression.

Children's Trust of Washington
605 First Avenue, Suite 412
Seattle, WA 98104
Phone: (206) 464-6151
E-mail: wpcan@wpcan.wa.gov
Website: www.wpcan.wa.gov

PROFESSIONAL RESOURCES

Enhancing Developmentally Oriented Primary Care: Illinois

Provider education and training on the healthy development of young children, which includes addressing perinatal depression, is available from the Enhancing Developmentally Oriented Primary Care (EDOPC) program operated by Advocate Healthcare, the Illinois Chapter of the American Academy of Pediatrics and the Illinois Academy of Family Physicians (web-based training), and the Mental Health Consultation Service.

EDOPC

1358 W. Randolph, Suite 2 East
Chicago, IL 60607-1522
Phone: (888) 270-0558

Family Connections in Head Start: Taking Prevention Seriously: Boston, MA

The Family Connections project is a strength-based prevention model that is being implemented across six Head Start and Early Head Start sites in Boston.

Family Connections
1 Autumn Street, Room 438
Boston, MA 02215
Phone: (617) 355-0494

Maternal Depression Screening: Train the Trainer: Iowa

As part of Iowa's ECCS activities, Maternal Depression Screening: Train the Trainer workshops are offered in partnership with the Iowa departments of Public Health, Human Rights, Management, Education, Human Services, Prevent Child Abuse Iowa, Head Start Collaboration Office, and the University of Iowa's Depression and Clinical Research Center.

Website: www.state.ia.us/earlychildhood/Maternal_Depression_Training/index.html

MedEdPPD.org: National

MedEdPPD.org is a professional education, peer-reviewed Web site developed with the support of the National Institute of Mental Health (NIMH). The site has two objectives: first, to further the education of primary care providers (pediatricians, family physicians, obstetricians, psychiatrists, nurses, physician's assistants, nurse practitioners, nurse midwives, social workers) who treat women who have or are at risk for postpartum depression (PPD); and second, to provide information for women with PPD and their friends and family members.

Website: www.mededppd.org/aboutus.asp

Perinatal Mental Health Consultation Service: Illinois

The Perinatal Mental Health Consultation Service operated by the University of Illinois at Chicago (UIC) is available to HFS-enrolled providers for consultation on perinatal depression. The Consultation Service is toll-free, provides consultation to physicians by psychiatrists, and provides information about medications.

Phone: (800) 573-6121

Watch Me Grow: Rhode Island

Watch Me Grow RI trains participating pediatric and family practices to screen parents using the Early Childhood Screening Assessment, which has four questions that directly screen for maternal depression. Providers are also trained in how and where to refer parents who screen positive for depression.

3 Capitol Hill, Room 302

Providence, RI 02908

Phone: (401) 222-5949

Website: www.health.ri.gov/family/successfulstart/watchmegrowri.php

PROFESSIONAL AND FAMILY RESOURCES

Postpartum Progress: Online

One of the most widely-read blogs on postpartum depression, written by Katherine Stone.

Website: <http://postpartumprogress.typepad.com>

Postpartum Support International: National

The purpose of the organization is to increase awareness among public and professional communities about the emotional changes that women experience during pregnancy and postpartum. The organization has a volunteer coordinator in every one of the United States and in 26 countries. PSI disseminates information and resources through the volunteer coordinators, the website and an annual conference. The goal is to provide current information, resources, education, and to advocate for further research and legislation to support perinatal mental health.

Phone: (800) 944-4PPD (4773)

Website: www.postpartum.net

