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Initial Findings from a Randomized, Controlled Trial of Healthy Families Massachusetts:

Early Program Impacts on Young Mothers' Parenting

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Executive Summary

This evaluation, a randomized, controlled trial of Healthy Families Massachusetts (HFM), a statewide child maltreatment prevention home visiting program for first-time young parents, examined the program's impact on child maltreatment and parenting in a sample of young mothers ($N = 687$) of infants and toddlers. The study addressed three research questions: (1) Is participation in HFM associated with more optimal parenting and lower rates of child maltreatment? (2) Do characteristics of individuals or their contexts moderate the relation between program and parenting? and (3) For mothers enrolled in the program, is there an association between program utilization and parenting? An introduction to the program, description of study methods, and highlights of the evaluation's key findings follow.

Healthy Families Massachusetts

HFM is a comprehensive, voluntary, newborn home visiting program for all resident first-time parents ages 20 and under at the time of the child's birth. Based on the Healthy Families America model, this paraprofessional program provides parenting support, information, and services to young parents, beginning prenatally and continuing until the child's third birthday. The program's goals are to: (a) prevent child abuse and neglect by supporting positive, effective parenting; (b) achieve optimal health, growth, and development in infancy and early childhood; (c) encourage educational attainment, job, and life skills among parents; (d) prevent repeat pregnancies during the teen years; and (e) promote parental health and well-being. Program services include weekly or biweekly home visits, with additional contact via phone and electronic media as needed ("secondary activities"), goal-setting activities, group-based activities (e.g., parenting education, peer support groups, social gatherings), and linkages and referrals to other resources.

Evaluation Sample and Methods

Participants in HFM were enrolled in the randomized, controlled trial between February 2008 and October 2009. Of the 26 HFM programs across the state, 18 were selected to be evaluation sites. In total, 840 young mothers were recruited into the study, and an algorithm was used to randomly assign 60% of recruits to the "Home Visiting Services Group" (HVS, or the program group), and 40% to the "Referrals and Information Only Group" (RIO, or the control group). Every recruited participant was invited to: (a) sign a release allowing access to state administrative data; (b) participate in a half hour phone interview (Impact Study, $N = 687$); and (c) participate in an additional two and half hour research visit, during which participants were given a semi structured interview, written questionnaires, and were filmed in an observation of mother-child interactions (Integrative Study data, $n = 512$).

The design of the evaluation is a three-wave study, with data collection at three different time points (Time 1 - Time 3) over a two-year period; this study uses data from Time 1 and Time 2. Parenting outcomes examined for this study included child maltreatment rates, as assessed by both administrative and self-report data; parenting stress, and emotional availability (maternal sensitivity, maternal non-hostility). Individual and contextual characteristics examined for possible moderation effects included depression, intimate partner violence (IPV), maternal history of maltreatment, social support, community demographic configuration, and neighborhood safety. Control variables included maternal race, maternal age, baby age, parenting status at enrollment, and use of parenting services other than the program under investigation. Multiple imputation was used to account for missing data. To assess predictive effects of program status on parenting outcomes, we conducted bivariate analyses, followed by nested multivariate linear and logistic regression models. To test moderation effects, we first ran a full moderation model for each outcome, and then, for those

models which sustained significant moderation, we parsed out variables with no significant influence in order to arrive at the most conservative, and therefore, robust statistical models.

Evaluation Findings

The rate of substantiated child maltreatment in the full sample (21%; $n = 145$) was ten times higher than the rate of maltreated infants in the national population (20.6 per 1,000).¹ However, the rate in these samples does not differ greatly from the Massachusetts rates of child victimization² during the years data were collected (29 in 2008, 24 in 2009, and 17 in 2010; respectively, the highest and then second highest in the nation).³ Neglect only (in absence of other forms of maltreatment) was by far the most common form of substantiated maltreatment (80%, $n = 137$), a figure that also is consistent with the national proportion of neglect among maltreatment cases (71%).⁴ Mothers were identified as the perpetrators in over three-quarters of all maltreatment cases ($n = 113$ of 145, or 78%).

The impact of the program on child maltreatment, as well as other major evaluation findings, are discussed below, organized by research question.

(1) Is participation in HFM associated with more optimal parenting and lower rates of child maltreatment?

- **More optimal parenting.** There was a main effect of program status on the outcome of parenting stress; mothers in the program group (HVS) showed significantly lower parenting stress than mothers in the control group (RIO). There were no significant differences between the program and control groups in Emotional Availability (maternal sensitivity, maternal non-hostility).
- **Child maltreatment.** Findings regarding program impacts on child maltreatment were inconsistent. In the smaller sample, (Integrative Sample, $n = 512$), program participation significantly predicted the likelihood of having substantiated reports of any type of maltreatment by mothers as well as substantiated reports of neglect by mothers; HVS children were more likely to have a substantiated maltreatment report and/or a substantiated neglect report than were children in the RIO group, suggesting there may be a surveillance bias at play. These differences, however, were *not* significant in the full sample (Impact Sample; $N = 687$). In neither the Integrative nor Impact Samples were there any significant differences in mothers' reports of maltreatment.

(2) Do characteristics of individuals or their contexts moderate the relation between program and parenting?

For certain subsamples of participants grouped by types of childhood maltreatment history, maternal depression, community demographic profile, and neighborhood safety, were significant moderators of the relation between program participation and parenting.

- **Depression and program impact on parenting stress.** Overall, HVS mothers reported significantly less parenting stress on average than did RIO mothers. But in a subsample of participants who either had no childhood history of maltreatment or had a history of neglect only, the difference between HVS and RIO in parenting stress was much more pronounced

¹ USDHHS, ACF, ACYF, Children's Bureau. (2010). *Child maltreatment 2009*. Retrieved from http://www.acf.hhs.gov/programs/cb/stats_research/index.htm#can.

² Rates are based on the number of victims divided by the state's child population, multiplied by 1,000

³ See USDHHS reports, *Child maltreatment*, for years 2008, 2009, and 2010.

⁴ USDHHS, 2010

among nondepressed mothers than it was among depressed mothers, suggesting that depression may attenuate or dilute program effects.

- **Community characteristics and program impacts on parenting stress.** Again, in a subsample of participants who either had no childhood history of maltreatment or had a history of neglect only, among mothers living in the lower income, slightly more urban and diverse communities, HVS mothers reported significantly less parenting stress than did RIO mothers, suggesting that the program may have had a buffering effect against the stresses of living in a lower income neighborhood. On the other hand, among participants living in the highest income, least diverse communities, RIO mothers reported lower amounts of parenting stress than HVS mothers. These findings are difficult to interpret; it may be that programs operate differently in different communities, and/or that what is perceived as stressful about parenting is modified by participation in a parenting support program.
- **Depression and program impact on reports of maltreatment.** In a subsample of participants who either had no childhood history of maltreatment or had a history of physical abuse only, RIO and HVS families who were above the clinical cutoff for depression had the same number of reports of maltreatment. However, HVS participants who were below the clinical cut-off for depression had significantly fewer reports of maltreatment than did nondepressed RIO participants. Like the finding regarding parenting stress and depression, these results suggest that depression may attenuate program effectiveness.
- **Neighborhood safety and program impact on reports of neglect.** Further evidence that the program may act as a buffer against economic stress may be seen in the finding that neighborhood safety also moderated the effects of program on parenting stress in a subsample of participants who had either no childhood history of maltreatment or experienced multiple types of maltreatment. In this group, among participants who rated their neighborhoods as less safe, HVS families were less likely to have been reported for neglect than RIO families. Interestingly, among participants who rated their neighborhoods as safer, HVS families were more likely to have reports of neglect than were children of RIO participants, again suggesting the complex interplay between program participation, community context, and parenting, and the need for further research.

(3) For mothers enrolled in the program, is there an association between program utilization and parenting?

- **More may be better.** As expected, bivariate associations indicated that the more program services participants used, and the earlier they enrolled in the program, the less likely they were to have reports and substantiated reports of maltreatment. Among families enrolled in the home visitation program, fewer reports of maltreatment were associated with prenatal enrollment, more home visits, more secondary activities, and a longer stay in the program. Participants who attended more groups had fewer supported cases of maltreatment with the mother as the perpetrator. Although these bivariate findings are encouraging, it is important to note that these associations were no longer significant once maternal demographics were added to the analyses, suggesting, not surprisingly, that it is extremely challenging to pinpoint what factors contribute to both program participation and maltreatment outcomes.

Conclusions and Program and Policy Implications

Findings from evaluations on the effectiveness of home visitation indicate only limited success in reducing child abuse and neglect, with notable gaps in the literature when it comes to pinpointing precisely which program strategies work best for whom and under what conditions (Howard, &

Brooks-Gunn, 2009). This study attempted to address some of the gaps in our understanding of child maltreatment among young parents, and the effectiveness of home visitation in preventing this phenomenon. We investigate how characteristics of young mothers, their childrearing environments, and components of program use shape the impact of the program on parenting.

Our results did show some evidence of early effects of the HFM on mother's parenting and child maltreatment. Some results, such as the findings about lower parenting stress among program participants, are straightforward and encouraging. Some results, such as the lack of program effects on the full sample for child maltreatment, are less encouraging, albeit not surprising, given what has been noted in the literature about the many challenges inherent in showing early program impacts on maltreatment rates. And some of the results, such as the finding that, for some subsamples of mothers with particular histories of child maltreatment, program effects are moderated by depression, neighborhood safety, and community characteristics, actually yield more questions than answers about how home visiting programs work for certain populations in certain contexts, under certain conditions.

Still, several clear implications for program administrators and policymakers emerge from these data. Given the high incidence of maternal depression among these young mothers overall, and the finding that HFM appears successful at supporting positive parenting for those mothers who are *not* depressed, but its effects are essentially neutralized in the population of program participants who are depressed, home visitors must become more knowledgeable about the manifestations and the consequences of depression, more adept at screening for it, more skilled at engaging and retaining these mothers, and more familiar with available community resources to which participants can be referred for treatment and additional support. Indeed, increasing successful program strategies, in general, to enroll young mothers early (preferably during their pregnancies), and keep them engaged over time, is of critical importance. At the community level, home visiting programs can, and should, consider themselves partners with other child and family serving agencies in the networks – the systems of care – that are developing within communities to serve vulnerable young families; however well-designed and implemented, they would be hard-pressed to effectively address this concerning maltreatment situation on their own.

The findings also suggest a panoply of directions for future research. Gaining a better understanding of the trajectories of young mothers who experienced particular forms of maltreatment as children, and the effectiveness of home visiting in disrupting intergenerational cycles of maltreatment given those subtype histories, is one promising avenue. Since reduction in parenting stress is an area where HFM seems to have considerable impact, we will explore these ideas in future analyses. Further exploration of the contributions that communities make to positive parenting is another; included here is developing more robust measures of community that will both differentiate them one from another, and account for both the challenges and strengths in those contexts. Detailing service utilization more fully, with particular attention to the nature and functions of the home visitor/client relationship, reflects another piece of this puzzle worthy of attention.

As this report is being written, the first ever, significant federal investment in home visiting is reaching communities and states across the country. The stakes are high for all involved – policymakers, practitioners, and families, at the local, state, and federal levels. The value of sound home visiting evaluation is not only in assessing the effectiveness of these services, but more immediately, in providing feedback on program implementation that can, possibly, be used to improve operations and to maximize the opportunities to help vulnerable families. We offer this study as a modest contribution to those efforts.