WORKING P A P E R

Factors that Influence Successful Start-Up of Home Visiting Sites

Lessons Learned from Replicating the First Born® Program

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Factors that Influence Successful Start-Up of Home Visiting Sites: Lessons Learned from Replicating the First Born® Program

Abstract

Growth in federal, state and private funding is fueling the initiation of home visiting programs around the country. As communities expand home visiting programs, they need information about how they can successfully start up new sites. This paper proposes measures of successful home visiting program implementation and identifies factors that promote successful implementation or serve as barriers to program initiation. We focus on lessons learned from the replication of the First Born® Program in six counties in New Mexico. Specifically, we examine how well sites met staffing, family referral and enrollment, program fidelity, and financing goals in the first year of providing services. Data come from semi-structured interviews with senior program staff and program documentation. The findings are likely to be valuable to a wide spectrum of communities starting or expanding home visiting services, as well as to public and private funders of programs.

Key Words: home visiting, implementation, early childhood, prevention, child and maternal health

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Introduction

A combination of new federal funding opportunities, philanthropic investments, and mounting research evidence is spurring expansion of home visiting programs in communities around the U.S. The health care reform bill, the Patient Protection and Affordable Care Act, includes a total of \$1.5 billion in new funding for home visiting, and every state is eligible to receive a portion of those funds.¹ This first recurring federal commitment to home visiting follows on the heels of a decade of expanded state investment in home visiting. It has been estimated that in the 2009-2010 fiscal year, 46 states and the District of Columbia invested \$1.37 billion in home visiting (Pew Charitable Trusts, 2011a, 2011b). Private funders have also increased their investments in home visiting. Perhaps most notably, the Pew Charitable Trusts launched a major home visiting initiative in 2008 as part of its Pew Center on the States. Furthermore, as the concept of “evidence-based programs” gained traction among government and private funders, home visiting has become recognized as a promising approach to preventing poor outcomes in areas such as health, education and criminal justice by groups ranging from the American Academy of Pediatrics (2009) to the Coalition for Evidence-Based Policy (<http://evidencebasedprograms.org/wordpress/>).

This paper proposes measures of successful home visiting program implementation and identifies factors that promote successful implementation. We share the lessons learned from expanding the First Born® Program (FBP), a home visiting program for first-time parents in New Mexico. Specifically, we summarize the factors that promoted successful replication of the FBP and those that served as obstacles to timely or smooth initiation of the program. We focus

¹ For the funding announcement, see <http://www.hrsa.gov/about/news/pressreleases/100610.html>.

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on the replication sites' ability to achieve staffing, referral and enrollment, and program fidelity goals in the first year of service.

The information in this paper comes from document reviews and interviews with program managers and other staff at seven FBP sites as well as interviews of funders, the FBP developer, staff at area hospitals, and government officials over a four-year period during which the FBP was expanding beyond its original site. Although the information we provide derives from the experience in scaling up the FBP, the lessons learned are likely to be valuable to a wide spectrum of communities who are implementing various home visiting models. The factors that we discuss include community outreach, hiring staff, recruiting families, and other issues that are common across all home visiting models.

The next section describes the context of the FBP, the communities that adopted the FBP, and the policy environment. In the third section, we provide an overview of previous literature on implementing social services generally and home visiting specifically. The fourth section details the methods we used for collecting information and the sample of sites that provided information. We present the findings regarding the factors that promoted or were barriers to implementing the program in the fifth section. The final section offers some conclusions.

The Context of the First Born® Program

The First Born® Program began in Silver City, New Mexico in 1997, but the second site did not begin operating until a decade later at the impetus of a private funder. Additional State and private funding increased the number of FBP sites over several years. This section describes the expansion of the FBP around the state of New Mexico between 2007 and 2010.

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The Policy Environment

In 2006, about a dozen home visiting programs operated around the state of New Mexico, and they included a range of program models, funding streams, and targeting strategies. There were services provided to children diagnosed with disabilities in the federal IDEA Part C Early Intervention program, a State-run case-management program for at-risk families, privately supported programs operated by local United Way agencies, and others that had patched together funding from a variety of government and private sources. However, at that time, the State did not commit recurring funding to a designated home visiting system.

Meanwhile, across the U.S., a quiet surge in home visiting programs was underway. By 2009, a survey of states reported that 40 of 46 states responding to the survey offered state-based home visiting services (Johnson, 2009). Additionally, the Pew Charitable Trusts had launched the Pew Home Visiting Campaign, which included increasing federal and state support for voluntary home visiting as a major goal. Meanwhile, the Nurse-Family Partnership (NFP) home visiting model had grown from two replication sites in 1996 to sites across 31 states in 2010, as well as a National Service Office that supported over 10 million dollars' worth of activity in the fiscal year ending September 2009.²

The recent increase in interest in home visiting programs has been attributed to the strong findings from a set of rigorous research studies conducted for the NFP (Gomby, 2005). Indeed, NFP has conducted three separate clinical trials using randomized control designs and consistently found improvements in child and maternal outcomes through the time the child was 15 years old (Olds et al., 1997; Olds et al., 1998; Olds et al., 2007). The statistically significant

² Nurse-Family Partnership, 2010, http://www.nursefamilypartnership.org/assets/PDF/Fact-sheets/NFP_Snapshot

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improvements over these first 15 years ranged from mothers being more likely to breastfeed to less likely to receive public assistance, and from children being less likely to visit the emergency room to having fewer sexual partners as adolescents. Furthermore, the effects were often sizable. For instance, when the children were between two and four years old, the nurse-visited children had 40 percent fewer notations of injuries and ingestions and 45 percent fewer notations of child behavioral and parental coping problems in physicians' records (Olds et al., 1994), and mothers in the program received public assistance for 30 fewer months compared to comparison mothers (Olds et al., 1997).

The growing evidence related to the NFP coincided with another trend in social programs: the evidence-based policy movement. Organizations such as the Coalition for Evidence-Based Policy advocated that the government favor social interventions that demonstrated effectiveness through randomized trial evaluations,³ and the Nurse-Family Partnership was the only early childhood program to earn the Coalition's "Top Tier" designation. Late in 2010, the U.S. Department of Health and Human Services released a list of seven home visiting models that they classified as "evidence-based" (Paulsell et al., 2010), and they have subsequently listed other programs that meet the standards used in this review.

At the same time, the Los Alamos National Laboratory (LANL) Foundation began to systematically review ways that they could help improve outcomes in their New Mexico focus area. The LANL Foundation is a private foundation committed to improving Northern New Mexico communities by investing in education, learning, and community development, and the Foundation is supported largely by LANL and its employees. The Foundation's strategic review

³ See www.evidencebasedprograms.org for further information.

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led them to focus on early childhood, and they decided that for the particular challenges facing the largely rural, poor counties in the area, home visiting had shown the most promise for improving child and maternal outcomes. They found convincing evidence for the effectiveness of the NFP and strong support for replication from the National Service Office, but for other leading models such as Healthy Families America, the research evidence was mixed or lacked replication infrastructure.

After gathering more information about the Nurse-Family Partnership, the Foundation decided that they were not able to implement this home visiting model. The NFP home visitors are registered nurses (RNs), and the Foundation determined that it would not be able to hire enough nurses in its Northern New Mexico service area, and in fact, this region and most of the state of New Mexico is designated as a Health Professional Shortage Area by the Health Resources and Services Administration.⁴ Notably, most analysts report that nationally there is a current shortage of nurses that is only expected to worsen in the coming decade (Buerhaus et al., 2009, Health Resources and Services Administration, 2006). Furthermore, the projected per family total costs of NFP are sizeable—the NFP website reports average costs of \$4500 per year, and families participate in the program from the first trimester of pregnancy until the child's second birthday.⁵

Why the First Born® Program?

Ironically, the LANL Foundation's national search for an appropriate home visiting program for Northern New Mexico took them to the southern part of their own state. They chose

⁴ See <http://bhpr.hrsa.gov/shortage/> for information about Health Professional Shortage Areas.

⁵ See www.nursefamilypartnership.org for further information about NFP, and www.nursefamilypartnership.org/assets/PDF/Fact-sheets/NFP_Benefits-Cost for cost information.

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to implement the FBP, which had been operating in Silver City for a decade, for several reasons: a technical assistance and training infrastructure, which would facilitate replication; use of a combination of nurse and non-nurse professionals; and costs that were about two-thirds of NFP costs. Furthermore, an evaluation of the original FBP site, published in a peer-reviewed journal, found that the program was meeting its stated objectives to promote family resiliency across several domains (de la Rosa et al., 2005). The LANL Foundation focused initially on implementing FBP programs in Rio Arriba County and Taos County in Northern New Mexico, and both programs began serving children in 2007.

In 2008, the State of New Mexico began its first recurring funding stream to establish and support a state system of home visiting. As of 2009, the State supported 14 organizations that provided home visiting services in 19 of the state's 59 counties. By 2010, five State-supported FBP sites were operating in these counties: Grant (Silver City), Los Alamos, Rio Arriba, Santa Fe, and Socorro. Additionally, a private non-profit health-promotion organization, St. Joseph Community Health, began funding and delivering the FBP in the metropolitan Albuquerque area in 2010. However, Taos County had abandoned the FBP model in 2009 in favor of their homegrown "First Steps" home visiting model, and they continued to receive state funding for this model.

All of these sites reported selecting the FBP for reasons similar to those cited by the LANL Foundation:

- Their organization's goal was to improve the types of child and maternal health that home visiting has shown promise in improving relative to other service strategies.

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- They recognized the evidence base for the NFP program, but they thought NFP was impractical for their community due to nursing shortages, perceived high cost of NFP, and the fact that they did not have enough births to meet the NFP's requirement of 100 high-risk parents in order to establish a site.⁶
- They valued the existence of FBP technical assistance and training to replicate the program in their communities, along with a written curriculum with materials that FBP provided.

Two published articles about the program showed that the program was achieving its intermediate family-functioning goals for participants (de la Rosa et al., 2005; de la Rosa et al., 2009).

The First Born® Program Model

FBP participants, who are generally mothers, can enroll during pregnancy up through the child's second month, and the program ends when the child reaches age three. Services are free and are offered to all first-time families. Trained home visitors deliver the program, typically in the child's home, using the trademarked FBP, which adapts previous home visiting models to a community-wide setting, including rural settings. Home visitors generally have greater than a high school education, some human services experience, and have met the competencies required as part of FBP training, as well as "shadowing" existing FBP home visitors. The home visitors work closely with local health care providers, hospitals, and social service agencies to identify and recruit first-time parents and facilitate access to preventive and developmental services. The FBP team includes a registered nurse, who provides a postpartum home visit offered to the

⁶ See <http://www.nursefamilypartnership.org/communities/local-implementing-agencies> for site requirements.

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parents of all participating newborns and continues to participate in the home visits when families encounter medical challenges. The FBP model calls for at least 40 weekly home visits in the child's first year of life. Visits may be less frequent in the child's second and third year of life.

The FBP uses a three-pronged approach to promote child and family well-being:

- **Family Education.** Home visitors work with the family to develop life and social skills such as decision-making, crisis intervention, and child developmental assessment and knowledge.
- **Problem Identification and Referral.** Home visitors use screening tools to identify family members who need referrals to other resources to address issues including substance dependency, family violence, and developmental delays.
- **Coordination of Community Resources.** Program staff participates in community-based councils, task forces, and other teams to ensure the effective coordination of data and services.

As a result of the program, participating families are expected to enhance family functioning and develop protective factors that will facilitate their positive development in the short and long term. The FBP is guided by three theories—self-efficacy and empowerment, family ecology, and attachment and bonding—that characterize behavioral change as dependent on an individual's beliefs, motivations, and emotions as well as the family's community context. Specifically, the program works to enhance family resiliency by promoting:

- Positive interaction between parent and child
- Positive parenting behaviors

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- Increased factual knowledge about pregnancy, delivery and child health
- Increased knowledge about the effects of alcohol, tobacco and other drugs
- Decreased risky behaviors on the part of the parents.

Ultimately, families are likely to experience better outcomes in the areas of physical and mental health, social and family interactions, cognitive development, and family goal and challenge management. The program helps families improve intermediate outcomes in the form of family behaviors, knowledge, and interactions, which in turn promote the mother's and child's physical and mental health and other outcomes such as improved education and absence of abuse and neglect.⁷

The FBP has participated in several types of evaluation. First, the FBP sites regularly collect data for continuous quality improvement and ongoing process self-evaluation. Second, the program has participated in two process evaluations. An evaluation of the original Silver City program, which examined whether the site was meeting its stated objectives rather than comparing the program to some alternative such as families not enrolled in the program, presented promising results (de la Rosa et al., 2005). Specifically, families scored much higher on measures of family resiliency, such as social support and family interaction, after participating in the program. A second study (de la Rosa, 2009) assessed the effect of the program on measures of participating families' well-being and the relationship between more home visits and family outcomes. This study found that after participating in the FBP, families' scores significantly improved on measures of social support, positive family interaction and caregiver characteristics, and families decreased the numbers of personal problems that would

⁷ For a more detailed description of the theory behind the FBP, see de la Rosa et al. (2005).

affect parenting. Furthermore, the number of home visits was significantly related to improved scores on these measures. Finally, a separate outcome evaluation under way by the authors of this paper will examine the effects of the FBP on child and maternal outcomes through age 2 using a randomized field trial design.

Implementation Literature and Organizing Framework

We review some of the most relevant entries in the general literature on the implementation of social services and then studies that focus on home visiting implementation. We place the current study in the context of the broader literature and provide a framework for assessing implementation factors for the FBP replication.⁸

Social Service Implementation Research

As a whole, both the health care literature and social science literature lament the dearth of research related to implementation (Rubinstein and Pugh, 2006; Fixsen et al., 2005). Implementation research is often framed in the context of providing evidence-based or evidence-informed services, where service providers are attempting to put research into practice. That is, evaluations have demonstrated that a set of practices or a particular program can successfully improve participants' outcomes, but only when replicating organizations can implement the intervention successfully. Implementation research provides information about how to successfully replicate these evidence-based or evidence-informed interventions.

Much of the implementation literature focuses on specific components of implementation, such as organizational factors that promote the successful adoption and

⁸ There is also a burgeoning literature on implementation in the health care sector, but we do not review that literature here.

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execution of innovative strategies (e.g., Greenhalgh et al., 2004) or how to achieve successful intervention fidelity (e.g., Carroll et al., 2007). We use concepts from the Fixsen et al. (2005) synthesis of implementation research to place this paper in the context of the broader implementation literature and to provide a framework for the assessment of the factors that promoted the adoption of this particular intervention. We chose to draw on this reference because it incorporates a comprehensive set of implementation factors rather than focusing on one or a few; it is heavily referenced in the field; and a number of federal initiatives that are highly influential for home visiting have provided training by Fixsen and colleagues or they have referred to the publication in their requests for proposals or other instructions to grantees (e.g., SAMHSA's Project LAUNCH grantees meeting and HRSA's Maternal, Infant, and Early Childhood Home Visiting webinar series).⁹

Fixsen et al. (2005) describe implementation as a process that can be characterized by the stages shown in Figure 1. This study assesses which factors facilitated and hindered communities' successful adoption and implementation of the FBP in the first three phases: Exploration and Adoption, Program Installation, and Initial Implementation. Specifically, we examine communities' activities after they had made the decision to adopt the FBP and up to one year after providing a home visit to their first client.

⁹ For further information, see http://projectlaunch.promoteprevent.org/webfm_send/1629 and http://eccs.hrsa.gov/Resources/docs/HRSAHomeVisitingWebinarMarch242011_508C.pdf.

Reproduced from Fixsen et al. (2005), p. 15.

Figure 1: Stages of the Implementation Process

Fixsen and colleagues further describe a set of multilevel influences that affect implementation. These influences include Core Implementation Components, Organizational Components, and Influence Factors. Core Implementation Components are factors that are related to successfully replicating a particular program model or curriculum with fidelity, and these factors include: staff selection, staff training, ongoing coaching and monitoring of staff activities and compliance with curricula, and evaluating organization-level delivery of the intervention. Fixsen and colleagues describe the Core Implementation Components as operating within the Organizational Components and that both of these also are subject to Influence Factors. The Organizational Components are the administrative structures and processes that facilitate effective delivery of the program model, and the organization-level components that

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must be well executed range from personnel management to fundraising to community outreach. The organizational level is also typically responsible for managing the impact of Influence Factors on the successful implementation of the intervention. The Influence Factors that can affect programs may vary over time and locations and may be manpower availability in one community, funding levels in another, and high-visibility media coverage of catastrophic child outcomes in yet another location.

Our examination of the factors that facilitated and hindered successful early implementation of the FBP incorporates all three of these levels of influence. Our interview protocols contained items that captured information about the functioning, context, resources, and influences for the core components that were specific to delivering the FBP as well as the organizational aspects and the external factors.

Home Visiting Program Implementation

Extant literature also provides information on implementing home visiting specifically. These studies range from a focus on state-level factors that influenced implementation down to site-level and even home-visitor level characteristics that were associated with various implementation outcomes.

Starting from the broadest perspective, several papers present information about state-level home visiting implementation. Wasserman (2006) reviews states' approaches to developing and sustaining state-based home visiting services. Wasserman discusses state experiences selecting which home visiting model to implement, how the states secured ongoing funding for home visiting, states' evaluation programs, and states' efforts to monitor program fidelity.

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Most studies of home visiting implementation examine implementation at the community level. Galano et al. (2004) describe the external influences that “set the stage” for a small city government adopting the Healthy Families America model as part of a comprehensive realignment of child and family services from a treatment paradigm to a prevention paradigm. Ammerman et al. (2007) also examine the implementation of home visiting in a large area, but in an urban metro area, and the organization that led the program development was a large research hospital. Ammerman and colleagues describe the origins of the program, challenges that they encountered throughout the process, and this program’s emphasis on data collection and continuous quality improvement as the program matured. Another study, Hicks et al. (2008), developed measures of the degree of community collaboration in the home visiting programs in 16 communities and tested whether these collaboration measures were related to the retention of families in the home visiting program. They found that the community collaboration measures explained a moderate amount of the variance in family retention.

Several studies have examined specific program factors in home visiting implementation. In their study of Hawai’i’s Healthy Start Program, Duggan et al. (2000) assess a number of process outcomes for a home visiting program for at-risk families with newborns to provide information about the ability of programs to identify and engage families. They found that early identification specialists could successfully execute population level screening to identify targeted families 84 percent of the time, and half of the families that enrolled were still participating at the end of the year. Those still enrolled after a year had received an average of 22 visits.

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Daro et al. (2003) examine which program level factors are associated with better family retention and a greater number of visits in a Healthy Families America site. Programs with lower caseloads and that had better matches between mothers and home visitors on race and parenting status had better results. Also at the program level, Culp et al. (2004) used the number of visits and curriculum content of visits as measures of program fidelity to document high levels of fidelity in a home visiting program implemented in five counties by a state health department.

Finally, some studies focused on implementation at the home visitor level or family level. For instance, Kitzman et al. (1997) documented common challenges that nurse home visitors encountered and how they overcame those challenges within the program specifications. Similarly, LeCroy and Whitaker (2005) document the most difficult situations encountered by 91 Healthy Families home visitors in order to inform training for home visitors. McGuigan et al. (2003) and Daro et al. (2003) investigate which family characteristics are associated with program retention. McGuigan et al. (2003) find that older mothers and Hispanic mothers are more likely to remain in a home visiting program. Daro et al. (2003) also find that the only provider characteristic that predicted both greater retention and number of visits was age, with younger home visitors having better outcomes. They also report that a number of maternal characteristics were positively associated with retention and number of visits including enrolling earlier in pregnancy, being unemployed or in school, and being older and African-American or Hispanic. Additionally, McFarlane et al. (2010) examine how home visitors' and mothers' attachment styles (e.g., trust) affect family engagement in the program and associated outcomes.

The research reported in this paper adds to this literature by documenting factors that promoted the successful first-year implementation of the same home visiting program model

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across multiple community sites within the same state. Hence, the program model core components and the state external influences were being held constant, and the community and site-level factors varied in our setting.

Methods

Measures

A vast literature exists on the implementation of social services and a small but growing literature on home visiting implementation, but there currently do not exist widely-used or standardized measures for assessing levels of implementation. We draw on the leading synthesis of implementation research (Fixsen et al., 2005) and a small set of studies that have proposed implementation measures or conducted similar analyses to guide the measures that we employ here (Proctor, et al., 2010; Quint et al., 2011) .

Our examination of the factors that facilitated and hindered successful early implementation of the FBP incorporates all three levels of influence described by Fixsen et al. (2005): Core Implementation Components, Organizational Components, and Influence Factors. Our interview protocols contained items that captured information about the functioning, context, resources, and influences for the core components that were specific to delivering the FBP as well as the organizational aspects and the external factors.

Given that the objective of this study is to identify factors that promoted or inhibited successful site start-up, it is important to be specific about the way “success” is defined in this context. Rather than successful start-up being expressed as one binary variable, in this case it is better characterized by success in achieving a number of outcomes (as in the Quint et al. [2011]

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study of scaling up a college completion program). We consider four measures of successful site start-up, and these are similar to the “implementation outcomes” proposed by Proctor et al. (2010).

One way to define successful start-up is in the financial realm—that is, whether sites were able to operate programs without running a deficit. All of the sites that we interviewed were able to successfully operate within their budgets during the first year with one exception, and this site had only a small budget deficit. Because there is no variation in this outcome, we are not able to relate successful financial operation to site-specific factors. Thus we do not report further on this measure.

A second way to define success in this start-up phase is the degree to which a site was able to hire, train, and retain staff according to plan within the first year. A third success measure is whether a site met its family referral and enrollment targets. Although this measure might seem to be the least subjective and more quantitative of the measures we have enumerated, it is in fact not obvious how this should be measured. FBP is intended to be a “universal” program, but not every family that is offered the program will enroll, and so there is some uncertainty about whether serving “all” families in an area implies enrolling half of families, 80 percent of families, or some other percentage. In addition, some sites only had enough funding to serve a portion of eligible families, and therefore these sites might reach full capacity while only serving a small fraction of eligible families in their area. Due to these considerations, we used the site’s target enrollment that they articulated prior to commencing home visiting as the standard that constituted successful referral and service numbers. This target number was often required to be stated as part of funding applications.

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A final measure of successful site start-up is the degree to which the site was able to deliver services with fidelity to the FBP model. We assessed this using reports from the sites about their activities and compared these to the guidance in the FBP fidelity, curriculum and other manuals (e.g., First Born® Program, 2009) and also to information provided by the program developer.

An additional measurement issue that needs to be explicit is the frequency with which we needed to observe the presence of a factor across sites in order to consider that factor a contributor to the successful start-up or an obstacle to successful start-up. We consider a factor to be supported as a contributor to a first-year start-up outcome if it was present in more than half of the sites that successfully achieved that start-up outcome and was not present in any sites that did not achieve that outcome.

Study Sample

We include six sites that chose to start the FBP in their communities between 2007 and 2010. Of these six sites, four are primarily rural, one is a small city, and one is in a larger city. One site stopped implementing the program after the first year. One is a very new start-up, beginning home visits in mid-2010, while two began the program in 2007, and the other sites began in between. Five of the sites are in counties with one primary hospital serving families, while one site is in a multi-hospital setting. Only one of the six sites had a strong home visiting presence in the community prior to implementing the FBP. The number of families served by these sites in the first year ranged from about 30 to 100. Note that we interviewed the original FBP site in Silver City, but we do not analyze their initial implementation, which occurred over a decade ago.

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Data Collection and Analysis Methods

The primary sources of data for this study are document reviews and in-person interviews conducted between July 2007 and July 2010 with senior program staff at each site, ranging from one to three persons per interview. We also followed up by phone with two sites in 2011 to ensure information was collected through the first year of implementation. At a minimum, we interviewed the program manager at each site, but for several sites we also included home visitors in interviews, and some sites included representatives of the hosting organization of the program (e.g., hospital, health agency). We used a common semi-structured, open-ended interview protocol to elicit opinions of site experiences as they started the program and staff perceptions of successes and obstacles to early implementation. We also asked specifically what lessons they learned that they would want to share with other sites starting up in the future.¹⁰ Each interview began with opening statements by the interviewers about the purpose of the interview and the confidentiality of responses, and respondents provided verbal consent to proceed with the interview.¹¹ We created an interview instrument with a set of questions to ask of each site, but we also allowed conversations to address other topics respondents wished to discuss. We interviewed each site at least twice to gather information for this study.

Two interviewers participated in each site interview, and both took handwritten notes. One interviewer had primary responsibility for note taking and typed up the field notes, which were then reviewed by the second interviewer for completeness and accuracy. Any differences in notes were discussed and final notes agreed upon by both interviewers.

¹⁰ One limitation of this approach is that it elicits indirect information about the program and not all persons are equally articulate or perceptive (Creswell, 2003). However, we used probing questions as necessary to try to elicit equally detailed information across sites.

¹¹ The authors' institutional Human Subjects Protection Committee reviewed and approved the consent process and site visits and interviews.

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We read through the final interview notes to first get a general sense of respondent perspectives and tone. Then we classified comments into several themes and categories within themes and noted when more than one site stated similar perspectives. In general, both researchers identified similar themes. We interviewed each site at least once after they had begun visiting families and within one year of start-up, but some had several more months of implementation experience than others. Thus, this study focuses on the sites' pre-implementation and early implementation experiences through the first year of serving families.

In addition to interviews, we also gathered site records such as quarterly or annual reports prepared for funders and basic site statistics. We also reviewed FBP documents and manuals, such as the First Born® Program Replication Guide (First Born® Program, 2009). One of the researchers is also a resident of New Mexico and regularly attended the FBP Evaluation Steering Committee meetings between summer 2006 and summer 2011. The researcher has also had periodic meetings and conversations with New Mexico state agency staff and communities about home visiting and other early childhood programs. These additional sources of information help serve as a validity check on the interview information. Furthermore, the study conclusions were shared with the interview respondents to ensure they felt the information stated by the researchers was accurate. Both researchers are currently conducting an outcome evaluation of one of the FBP sites in this study.

In terms of the stages of the implementation process as outlined in Fixsen et al. (2005), the study period corresponds to the period after the site has decided to adopt the FBP through program installation and initial implementation. This includes varying numbers of months of community outreach, hiring and training staff, serving families and other activities.

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Results

We describe here the factors that are either contributors or obstacles to the successful first year start-up, organized by the three start-up outcomes that varied across sites. All of the sites were able to operate within their first-year budget, so we do not analyze factors that contributed to this successful financial outcome for the sites.

Staffing

The sites' abilities to meet first-year hiring and training goals varied by position—that is, the FPB experience on this outcome was different for the home visitor, nurse, and program manager positions. All sites were able to hire and train home visitors according to plan, and the sites were generally able to retain the majority of home visitors. At most sites, enrollments grew over the first year rather than enrollments starting at a steady rate as soon as services were offered. As a result, it may be preferable to add home visitors as a site's enrollment grows rather than hiring upfront the entire expected number of home visitors needed at full capacity. The noted tradeoff to this approach is the need to stagger staff training as new home visitors are hired, and that may be less efficient. But one risk of hiring the entire staff at the outset is having more home visitors than are needed for enrollments, which can lead to overstaffing for many months and the need to keep staff engaged in other ways.

Home visitors are not the only staff involved in the FBP, however, and there were some challenges in staffing the other positions. The FBP model includes a registered nurse at each site, and this nurse conducts a post-partum home visit for each family, undertakes a file review periodically with each family's home visitor to identify instances where medical intervention or screening might be warranted, and teams with other home visitors when any medical issues arise.

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Given the interpersonal nature of home visiting, the FBP highly recommends that nurses be bilingual so that the nurse can communicate directly with the majority of families, who would speak either English or Spanish. Several sites had difficulty hiring or retaining nurses in the program because of a general community shortage of nurses, FBP pay scales that were lower than hospital pay scales, or lack of bilingual skills. Thus these sites adopted different approaches to hiring for this position to ensure at a minimum that a nurse or other certified health professional could perform the postpartum visits to assess medical issues. Sites used different methods depending on community factors, including hiring a licensed nurse practitioner (LPN) or certified doula in lieu of a registered nurse, contracting with a non-FBP nurse to perform postpartum visits as needed, or including a bilingual home visitor on nurse visits with Spanish-speaking families. While this approach to mitigating this staffing challenge has been received positively by the site and the FBP developer, it is noteworthy that hiring a nurse, and especially a bilingual nurse, may be a challenge for future sites.

Another position for which some sites experienced obstacles was the program manager position. All the people we interviewed stressed the fact that this position was of paramount importance for a site's success, and that achieving excellence in this position was critical. Indeed, the responsibilities of the program manager are numerous, span a wide range of skills, and involve difficult and sensitive tasks, such as close supervision of staff, meeting financial goals during tough economic times, and delivering regular and sometimes lengthy reports to various funders and the program developer. Many program managers reported high levels of stress and burnout, and this resulted in manager resignations in some instances. While this rate of leadership turnover may not be unusual for human services providers, it is certainly an area where new sites should give extra attention.

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Program managers suggested a number of ways to reduce the burden and provide support for this very challenging position. They reported that having regular meetings between managers was very helpful, because it facilitated peer-to-peer information sharing, and also provided an informal support network of individuals facing many of the same challenges. It may be beneficial in these types of peer networks to stratify program managers according to experience, because more experienced managers found these meetings to be a drain for them personally, because they felt they only provided assistance to others at these meetings and did not get much value in return. Program managers also stressed that having regular and frequent access to the program developer was a boon to new program managers, because the program developer could answer questions and acted as a “cheerleader” and supporter when challenges arose. Moreover, administrative assistance in the office, whether paid or volunteer staff, can facilitate the manager’s work and help manage the workload.

Family Referrals and Enrollments

Four of the six sites met or exceeded both their family referral and enrollment objectives by the end of the first year of providing services. One of the key factors that many sites reported they believe can promote success on this outcome is implementing what the FBP refers to as the “preimplementation phase” for at least six months (First Born® Program, 2009), especially for sites without a community history of home visiting. This phase typically takes place before services are offered to families and emphasizes relationship building with community organizations and outreach activities to promote the program and corresponds to the “Program Installation” stage in Figure 1. The program’s fidelity manual emphasizes engaging the local medical community, but it is also expected that the site will engage other community

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stakeholders that might refer families to the program, or to which the program might refer families. These other stakeholders may include teen parent programs, probation officers, IDEA early intervention service providers, homeless shelters, family violence prevention programs, and a host of others. Staff at sites expressed a belief that this preimplementation phase would take at least six months to be effective at building the necessary trust and relationships in the community for a strong referral system when the program commences. Additionally, sites that did not engage community stakeholders in numbers and intensity suggested in the FBP Replication Guide (First Born® Program, 2009) were not able to meet referral goals at one year. The NFP home visiting program advises communities that the planning and preparation to establish a site typically takes 12 to 24 months.¹²

We also found that sites that committed to community outreach as an ongoing core component of site activities were more likely to achieve referral goals in the longer term. Site staff reported believing that community education also needs to be revisited on a regular basis because there was a high level of turnover in staff at collaborating agencies. Also, because they were serving families with first born children, they were trying to recruit families that were often having their first interaction with the child and family services community so their recruiting pool was always turning over.

Upon starting to recruit families, many sites experienced a pattern where initially they had more postnatal referrals, primarily from the hospitals, but that as the word spread in the community over time, a higher fraction of referrals were prenatal cases. Moreover, sites where there was a high rate of deliveries at the local hospital (generally one hospital per county) met

¹² http://www.nursefamilypartnership.org/assets/PDF/Communities/NFP_state_guidance, accessed September 3, 2011.

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referral targets faster than sites where larger fractions of the community's babies were delivered in the nearest cities or at regional medical centers in the state.

Several sites mentioned that getting a face-to-face meeting with a referred family greatly increased the chance that the family signed up for the program. Common reasons that families will give for not enrolling in the program are that they have extended families to help or that they are too busy or don't have the time to do the program. For those that enroll and then drop out within the first year for reasons other than moving out of the service area, sites saw time constraints and returning to work as important factors.

In terms of meeting enrollment targets, in general, sites that were funded to serve a smaller fraction of eligible families in their catchment area were more likely to achieve their target enrollment numbers. Sites that had enrollment targets over the first year that allowed flexibility for a scale up over time as the referral networks grew were also more likely to meet enrollment goals.

Program Fidelity

Two of the six sites experienced challenges meeting FBP fidelity by the one year mark. All the sites admitted to some of the same challenges that these two sites encountered in terms of achieving and maintaining fidelity. Nearly all of the factors contributing to challenges in maintaining fidelity were related to funding in one way or another. For instance, one of the primary factors that threatened adherence to model fidelity was the conflict between requirements of the funders of the sites and the fidelity requirements of the FBP. An example of this is in the area of data collection and reporting. The State funded many of the FBP sites, and one of the conditions of receiving State funding was to collect an extensive amount of data about

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the families and administer required assessments on a regular schedule, and enter these into a State-maintained Web-based data system. While the staff recognized the value of data and monitoring, they indicated that meeting the State data collection requirements took so much time during the home visits that they were unable to spend the time required to deliver the full FBP curriculum. Based on feedback from home visiting sites, the State did reduce the data collection burden in the third year of State home visiting funding, which greatly mitigated this conflict.

The sites also reported that FBP model guidelines conflicted with the State requirements. An example of this can be found in the FBP eligibility standards, which specify that families are enrolled in the program by the child's second month of life and that all first-time families are eligible. The State home visiting funds supported home visiting services up to a child's third birthday, without requiring the family enroll by the child's second month, and the family does not need to be parenting for the first time. Some sites identified families with children older than two months, whom the site noted would be likely to benefit from home visiting, and sites found it particularly difficult to turn away such families when they could use the State funds to provide them services. Other sites noted a pressure to achieve initial enrollment targets and felt that enrolling older children would help meet this demand. A second example is that the FBP model stipulates that families should receive 40 visits in the first year of life. However, the State funding is not accompanied by a requirement to provide services at this level of intensity and can provide more flexibility to serve additional families.

Another issue related to both fidelity and funding is knowing how much the full cost of implementing the FBP model would be for each particular site. The State funding was based on a per-family payment that did not differ across locations. However, the cost of implementing the

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FBP with full fidelity varied considerably across sites. One variable that greatly affected costs was the price of gas, which grew dramatically over the period. One site covered a county larger than the state of Massachusetts, while other sites served families primarily in urban areas or at least more circumscribed areas. Another variable was the amount of costs that were provided in-kind, and this also varied widely across sites. Some sites had office space, utilities, or other goods and services donated by their host organization (e.g., hospital, community agency). Some sites received donations or contributions in the form of books, car seats, or other promotional items for families, and some also had in-kind labor ranging from volunteers who provided administrative assistance to partial payment of leadership positions from the host organization. An additional type of cost uncertainty that sites faced was the lack of an estimate regarding the costs of the pre-implementation phase activities. All sites stressed the value of these activities, but they also indicated that there was not clear information about how much these activities would cost or who would pay for or reimburse them for these costs. Specifically, the state funding for FBP did not reimburse for pre-implementation costs. The uncertainty about what the program would cost led to considerable stress for some sites, and some program managers reported taking time away from other responsibilities in order to write proposals for funding or engage in other fundraising activities to raise the funds to cover unanticipated costs. Several managers mentioned that they spent more time on fundraising activities than they had expected when the program started.

Discussion

Based on the experiences of the six sites that began delivering the FBP in New Mexico between 2007 and 2010, we identified a number of ways that future home visiting sites could

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raise the chances that they successfully achieved outcomes in the areas of staffing, referrals and enrollments, and fidelity in the first year of providing services. These include:

- Plan for a pre-implementation phase of at least 6 months to ensure adequate community outreach about program services and relationship-building with other community organizations, with particular emphasis on the health care community
- Prepare for challenges in hiring bilingual nurses, such as a need to potentially provide higher pay scales or seek alternative ways to provide the program components delivered by nurses
- Offer supports for program managers to facilitate their ability to fulfill position requirements and prevent burnout
- Build the need for ongoing community outreach into planning for staff levels of effort in addition to their providing direct client services
- Expect enrollments to grow over time and add home visitors as enrollments increase
- Try to estimate how costs for your site may vary from others, such as transportation needs or available in-kind supports
- Meet with referred families in person to increase take-up rates
- Anticipate potential conflicts between funding requirements and model guidelines.

An important overarching generalization is that it is reasonable to expect that the first year of implementation will be a learning year where all targets may not be achieved. Indeed, out of the six FBP sites, only one site met its objectives in all four of the outcome areas we

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examined. The sites were different in terms of key contextual factors related to the implementation outcomes. These include factors such as the available workforce, the geographic size of their catchment area, and the degree to which the infrastructure of their host organization provided support. The FBP curricula and the replication guide provided a great deal of structure for the home visits, but aspects of the program operations outside of home visits were subject to more uncertainties. Hence, in the first year, the sites negotiated these aspects by developing systems and networks that could contribute to successful program implementation in future years. These findings are consistent with those of Fixsen et al. (2001), who suggest that full program implementation through all the six stages presented in Figure 1 is likely to take three years.

Though these findings are based on experiences in one state and for one program model, these lessons are likely to be valuable to all communities that are starting home visiting programs. In addition to the lessons from the FBP experience being useful to new home visiting sites, new federal and state home visiting funding initiatives can also incorporate these lessons into their start-up requirements.

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