# Capturing the Essential Elements

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Public/Private Ventures is a national nonprofit organization that seeks to improve the effectiveness of social policies and programs. P/PV designs, tests and studies initiatives that increase supports, skills and opportunities of residents of low-income communities; works with policymakers to see that the lessons and evidence produced are reflected in policy; and provides training, technical assistance and learning opportunities to practitioners based on documented effective practices.

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## Introduction

When REAL Enterprises (Rural Entrepreneurship through Action Learning) began operations in 1990, it was among the earliest nonprofit initiatives to catch the wave of new social entrepreneurship that has since become an important focus of contemporary philanthropy. Launched by a dynamic visionary, REAL taught entrepreneurial skills to rural highschool and post-secondary students. In true entrepreneurial spirit, the idea caught on quickly, and in a matter of a few years, REAL programs had popped up in several states.

But there was a problem. Other than the name, a belief in the value of entrepreneurship training and an annual gathering, the programs did not have much in common. Because REAL's founders favored allowing each program to follow its own path, there were no well-defined standards governing the replication of their approach around the country. As a result, program activities and quality varied markedly, making it increasingly difficult for REAL to generate support and funding nationally. Recognizing that they were not likely to succeed by continuing to let a thousand flowers bloom, REAL's leaders decided, six years after its launch, to define the program in a specific way for the first time and establish program standards to guide the replication process in the future.<sup>1</sup>

REAL Enterprises' story is not unusual. Programs that seem like strong candidates for application in new settings often fail to define their essential elements clearly, completely or, occasionally, at all. Sometimes program developers are so immersed in the operating details of their programs that it is difficult for them to step back and accurately identify the key components. Other times, developers intentionally define their models in general terms in order to broaden their appeal or in anticipation of a need to accommodate local differences. Failure to define the program precisely does not necessarily prevent initial replication, but it does almost assure, as REAL's experience illustrates, wide variations in quality—and substantial investment will not long flow to programs that cannot offer consistent quality as they expand.

# How Does a Program Work and Why Does It Work?

What structures, activities and external relationships are crucial to a program's success? While the particular essential elements vary from program to program, they generally include demographic or other characteristics of participants; intensity and duration of programming; the content and flexibility of activities; key transition points for participants; the presence and types of requirements and incentives for participation; performance expectations for participants and staff; staff qualifications and configuration; characteristics of the organization that operates the program; and the program's relationships with other organizations and agencies.

Identifying these elements for a program that seems ready to expand is a fundamentally important task. Replication and expansion efforts require substantial commitments from funders, developers of the program being replicated and practitioners who adopt it in their communities. All benefit when they have an accurate understanding of what leads to the program's positive outcomes. Knowing which elements need to be implemented helps funders calculate the costs of the program and decide whether it is a worthwhile investment. For developers, or whoever is leading the replication effort, identifying the essential elements is the necessary first step in creating materials and training plans and providing new sites with effective guidance for implementation. This level of specificity also allows practitioners who might be interested in adopting the program to make informed decisions about

whether it is a good fit with their agency's priorities and with local characteristics, and what would be required of them if they became a site.

Identifying essential elements is typically not an easy task. Programs are forms of knowledge, and one can never be entirely certain how the knowledge reflected in any given change model causes the favorable results attributed to it.<sup>2</sup> Some ambiguity always remains. Social programs have the added complexity of focusing on trying to modify the behavior or attitudes of people—either program participants or those who affect them. And since programs are, in essence, co-produced by their staffs, participants and others, they will inevitably vary to some extent from one location to the next because the people involved vary. These are not arguments against identifying essential elements. Rather, they are reasons for being particularly careful, when analyzing program experiences, to define those essential elements and to identify what flexibility programs must have so they can be adapted to local circumstances without compromising the ability to achieve results.

#### The Structure of This Report

The following paper draws on the experiences of the Replication and Expansion unit of Public/Private Ventures. It takes its examples from three programs that were designed in different ways, have been in existence for varying amounts of time and had different degrees of opportunity to refine their operations before preparing to expand to new sites. The first, Philadelphia@Work, is a transitional work program that was developed to help the hard-to-employ gain work experience and get unsubsidized jobs to meet the requirements of the 1996 federal welfare reform law. Given the urgency of the problem, the program was designed and implemented quickly, and to some extent it was still in the process of self-modification (in its original location in Philadelphia) when it began to prepare for replication in response to other cities' interest in effective transitional work models.

Plain Talk, the second program profiled here, is a teen pregnancy prevention initiative that focuses on sexually active youth. An evaluation of the initiative in several demonstration sites found promising results,<sup>3</sup> and the program's developers at the Annie E. Casey Foundation wanted to extend the initiative to other communities. However, Plain Talk did not yet have a single, well-defined program model to replicate. The initiative had been piloted in five sites, and recognizing the challenges involved in forging a wide consensus on a topic as sensitive as adolescent sexuality, the developers had taken a decidedly grassroots approach. While they had presented sites with Plain Talk's basic objectives and possible strategies for implementation, each of the five sites had, to a large extent, crafted the specific elements of its program so it would be most likely to work in the given community. Now, in order to expand Plain Talk, developers had to identify which elements had contributed to the positive evaluation findings and build on those elements to construct a replicable program model with enough flexibility to adjust to relevant local differences.

The third program is the Nurse-Family Partnership (NFP), in which nurses visit low-income women in their homes during pregnancy and the first two years of the child's life. The program was developed in the 1970s in response to the emerging realization that the early childhood years were crucial in shaping the life course of both children and their parents, and that without help during this period, low-income families were at greater risk for poor outcomes. By the time the NFP was ready to expand in the late 1990s, it had been tested and refined in three communities over a period of almost 20 years; random assignment research, the most demanding form of evaluation, had established the model's effectiveness.<sup>4</sup> Because of this long and rigorous history, it was initially relatively easy to define the program's essential elements. But as the replication proceeded, experience pointed to the need to adjust and modify the model if its effectiveness was going to be realized and sustained in new locations.

While each program represents a different approach to identifying essential elements, they all point toward the critical role played by this task. A concluding section of this paper briefly draws together the experiences with these programs to outline several lessons that should be useful for other programs or initiatives seeking to extend their reach.

# A Single-Site Model: Philadelphia@Work

The federal welfare reform law enacted in 1996 imposed stiff new work requirements and time limits on public assistance. Philadelphia@Work was established to help welfare recipients with the greatest barriers to employment meet these new requirements, and from the time the program was conceived, the hope of many of those involved was that if it proved successful it could be offered for replication in other communities. The new law's emphasis on getting recipients off the rolls and into unsubsidized jobs sooner rather than later created demand around the country for already-available models. If Philadelphia@Work helped enough recipients get and keep jobs in a tough urban environment like Philadelphia, the thinking was that it could probably accomplish similar results for the hard-toemploy in other locations as well. Getting the program off to a quick, effective start would allow the prospects for its replication to be considered while states and communities still had substantial unspent funds under the federal law.

#### **An Evolving Design**

The initial model for Philadelphia@Work was based on experience with supported work programs,<sup>5</sup> and in many respects it had a logical and coherent design from the start. Its elements were intended to build cohesively toward the goal of moving participants into unsubsidized jobs with wages and benefits, leading to financial stability. The program provided intensive orientation and then placed participants in transitional work that suited their skills and interests and would make for valuable learning experiences. While in their transitional jobs, participants also spent up to ten hours a week in workshops designed to strengthen their skills. The program developed leads for suitable unsubsidized jobs, and after participants entered those jobs, staff stayed in touch with them for several months to help address potential problems.

All along the way the program provided help, when necessary, with supports such as transportation and child care.

While these elements existed in the original design, the experience of implementation in Philadelphia had led to several important adaptations. First, implementers had worked to shape the program's culture so it more precisely reinforced program goals. They treated participants as employees rather than clients, and tried to ensure that their experiences in the program were consistent with the rules and norms of the private labor market in which they were ultimately expected to find and keep jobs. This businesslike approach seemed likely to ease participants' movement into the culture of the work world. In addition, many of the participants had been unsuccessful in previous job-preparation programs, and it was motivating for them to be in a culture that felt different from places where they considered themselves to have failed.

Another important modification took place when it became clear that the original staffing structure was beginning to work against the program's effectiveness. Over time, as the program grew and the number of staff increased, departments in the Transitional Work Corporation (TWC), the organization running the program, began to build silos around themselves. The various staff members who worked with participants during transitional job placements, professional development training, and placement and retention in unsubsidized jobs did not regularly communicate with one another. As a result, despite the coherence that theoretically underlay program activities, participants were being lost in the gaps between departments. Once the problem was identified, staff were reorganized into teams that included a career advisor, a professional development workshop facilitator, a job developer and a retention specialist. Each team became responsible for about 100 participants throughout their time

in the program—a structural change that improved communication among staff and coordination of services for participants.

TWC was still settling into this staff reorganization when outsiders' interest in tapping the program's rapidly evolving expertise began to intensify. With support from private funders, TWC entered into an agreement to help the employment and family services authority in Cuyahoga County, Ohio, where Cleveland is located, develop a program based on Philadelphia@Work.The National League of Cities, in Washington, D.C., established a project to help cities wanting to create new or better transitional jobs programs for welfare recipients, and recruited TWC to be a key provider of technical assistance. The Pennsylvania Department of Public Welfare, the largest funder of Philadelphia@Work, solicited TWC's help in developing a similar effort for people with limited English language skills.TWC was also called on by the U.S. Department of Labor to help other local employment programs design information systems to track their participants' characteristics and progress.

It is not unusual for a program to emerge at the right time, do a good job, and then, before it has worked all the kinks out of its own design, be called upon to help others. The issue TWC faced was whether to continue to wait for others to ask for its assistance or to pursue a more proactive replication strategy. On the one hand, responding to emergent demands required relatively modest investments of time and effort and minimized the risk to TWC if its help to others failed to pay off. On the other, such modest investments would probably mean smaller results than could be achieved through actual replication. The challenge of replication, however, was that the program in Philadelphia was not a finished product: it had generated good outcomes so far, but that was only over a three-year period and only in one site. Could Philadelphia@Work, a young work-in-progress, reproduce its effectiveness in other communities?

#### **Defining the Replicable Model**

Answering this question involved examining both the program model and the environments in which it might be replicated.TWC had been highly intentional about the ongoing design of Philadelphia@Work. Detailed manuals and guidance documents existed from which one could derive a specific understanding of how the program was supposed to operate. However, like many programs rooted in a single site, it was not necessarily the case that every element of the program in Philadelphia could or should be required in new sites. Thus, the only way to get at the required elements was to break the program down into the detailed features of its Philadelphia operation and judge whether each feature would be essential to performance if the program were adopted in other cities.

The definition of the essential elements of Philadelphia@Work occurred in two stages. Because the program had not been formally evaluated, the initial stage involved a more general review to determine whether it was worthwhile to attempt to replicate it. Worthiness was assessed by asking a five-part question relevant to just about any program being considered for replication:

Does the program (1) address an important public problem using (2) legitimate methods that can achieve (3) positive, measurable results in a (4) timely manner, and (5) can alternative explanations for those results be ruled out or minimized?

The major concern involved the level of confidence one could have that the program, and not other factors, was the main cause of its positive results in placing participants in unsubsidized jobs. The program's brief track record in a generally favorable labor market for low-income workers raised the possibility that the model might not be as effective if the market had a downturn. But given the almost relentless failure of previous efforts to help the hardest to employ, Philadelphia@Work's shortterm results made it appear worthwhile to move ahead with replication.

This initial stage of examining the program also involved defining the model as it existed in Philadelphia to understand whether the elements were specific enough and fit together well enough to make it possible for other communities to replicate it. This examination did not yet ask which elements were essential and which were not, but whether, overall, the program was well designed and relatively straightforward. Philadelphia@Work easily passed this test.

With the Philadelphia operating model clearly and specifically defined in this first stage, the second stage focused on making logical judgments about the necessity of each element in reproducing the program's outcomes in other sites. Elements were examined with the intent of not only identifying requirements for replication but also developing an understanding of the nature and scope of any flexibility that should be built into each requirement if the program was to be successful elsewhere.

Several elements seemed important for inclusion in the replicable model: they were believed to be critical to the performance of the program in Philadelphia, and could be implemented in a fairly straightforward way in new settings. They included:

 Focusing on those adults for whom an intensive short-term program would be most cost-effective adults with little or no previous work experience and with other barriers to employment, such as prolonged welfare dependency and poor education.
 A new site would not have to serve everyone who might qualify under this definition. It could focus on one or more subgroups (for example, ex-offenders or the homeless), depending on community needs and resources.

- Requiring all participants to go through an intensive two-week orientation to prepare them for entry into transitional employment. While the precise content and format of the orientation could vary in new sites, the overall focus would be on teaching participants about workplace etiquette and responsibility, matching them with appropriate transitional placements and making arrangements for any support services that might be necessary, such as child care, transportation or substance abuse counseling.
- Placing participants in transitional jobs for at least 25 hours a week, up to six months, at the prevailing local minimum wage. Participants would be placed in jobs consistent with their aptitude and interests, thus preparing them for unsubsidized employment. Within these parameters, arrangements could vary: for example, a new site might require more hours of work per week or pay at a level above the minimum wage.
- Providing participants with training during their transitional placements in order to strengthen the skills they would need for unsubsidized employment. The format and content of training could vary to meet the needs of different participants.
- Treating participants as employees of the organization that operated the program. This approach helped reinforce work values, reduced the burden on transitional employers and assured competent supervision of each participant. Variations would be possible around the specific form supervision took, so long as it was carried out by skilled people on a consistent basis.
- Tracking participants' progress using a management information system designed specifically for a transitional employment program. The categories of data would need to be the same across sites, but how the data were collected could vary.

While these elements were highly consistent with the Philadelphia program model, there were four additional elements that had defined the approach in Philadelphia but would probably need to be modified to suit circumstances in other communities-without, it was hoped, putting performance at risk. First, Philadelphia@Work had been created through an unusual partnership of state and city government and a large private foundation. Given the complex work requirements and funding streams that had resulted from the new welfare reform law, this partnership brought real benefits. State and city support was obviously essential for the program to succeed, and the foundation's support had made it possible to establish a new, independent nonprofit organization, TWC, to operate the program and devote significant attention to developing ties with private-sector employers.

New sites, however, were unlikely to be able to replicate this unusual level of collaboration and support, consolidated in an organization set up specifically to run the program. Thus, in defining the replicable model, it was necessary to give new sites the flexibility to design a different organizational arrangement, so long as it reflected what was considered essential about the structure in Philadelphia. Ultimately, that element focused on the characteristics of the organization that would run the program: it should be a well-managed nonprofit with direct support from both the public and private sectors and the ability to focus a large share of its organizational effort on the transitional work initiative.

Second, while Philadelphia@Work had used only nonprofit and public agencies for its transitional work placements, it seemed sensible to allow replication sites to use for-profit employers as well, so long as the resulting placements did not displace regular jobs. Philadelphia has a committed public sector and a large and diverse nonprofit sector, including one of the largest concentrations of hospitals in the world. It could not be assumed that other communities would have the same degree of access to nonprofit and public employers.

A third element that required modification concerned the length of time that new sites should follow up with participants after they entered unsubsidized employment. This aspect of the program had been debated in Philadelphia from the outset. Initially, the model called for a year of follow-up. The time requirement in Philadelphia was then revised to six months, both to keep program costs under control and to reflect the reality that participants had different degrees of need after they started work in unsubsidized jobs. Thus, while it was clearly essential that replication sites have a follow-up component, they could be flexible in deciding how long they would stay in contact with participants.

A final modification involved the program's staffing roles. As a large program, Philadelphia@Work had developed complex staffing consisting of several job categories-this complexity could feel daunting to potential replicators and might not be necessary in smaller-scale versions of the program. Thus, the replication model included one key staffing role: a career advisor who worked with each participant throughout their time in the program. During replication, sites could be helped to build a staffing structure based on this central position and with an emphasis on teamwork in assisting participants. Focusing on this key role and giving it the business-oriented title "career advisor" would have the additional advantage of making the program's culture and goals easier to discuss with prospective funders, policymakers and members of the public.

The practical purpose of defining the replicable version of Philadelphia@Work was to provide interested communities with the information they would need to make an initial assessment of the appropriateness of adopting the program. This information included not just the description of the model but also estimates of the cost of replicating it based on Philadelphia's experience. If program developers provide too little, or too general, information, it becomes difficult for potential replicators to make a rational decision about whether the program is right for them. The ambiguity creates room to misinterpret requirements and expectations. TWC wanted interested communities to be as clear as possible about what would be involved if they chose to replicate.

The program description, including cost estimates, was used to market test the interest of several communities in adopting Philadelphia@Work. On the whole, community leaders liked the model and could see how its features might offer an effective way to help the hard-to-employ. However, by the time of the market study, resources for replication had dwindled. When TWC first began considering replication, funding was still available around the country for welfare-to-work programs, but dollars dried up quickly as the time constraints of welfare reform pressed states and localities to act. In an overall environment of shrinking resources, interest seemed to be shifting toward less expensive models capable of serving all welfare recipients, regardless of their relative employability. TWC was able to continue to provide technical assistance on transitional work programs, but a full replication would have to wait until the funding environment improved.

## A Multisite Community Initiative: Plain Talk

Because Philadelphia@Work was operating in only one site, the process of identifying essential elements was relatively straightforward. The situation with Plain Talk, which had been piloted in five communities around the country, was more complex. The impetus for that initiative had come from a comparison of adolescent sexual activity, pregnancy and birth rates, and sexually transmitted diseases (STDs) in the United States and Europe. The program's developers at the Annie E. Casey Foundation noted that while rates of sexual activity for adolescent women were similar, pregnancy and birth rates and the incidence of STDs were significantly higher in the U.S. A major reason for the lower rates in Europe appeared to be that youth there had greater access to contraceptive services and received stronger, more consistent messages in support of contraceptive use than did youth in the U.S. In addition, research in this country suggested that youth's peers, rather than adults, were their primary source of sexual and contraceptive information; that given the right environment, adults would be able to communicate effectively with youth about sexual responsibility; and that the community can play an important role in the sexual decision-making of its youth.6

Building on this research, Plain Talk was intended to create a consensus among a community's adults about the need to protect sexually active youth by encouraging early and consistent use of contraceptives, and to provide the adults with information and skills that would help them communicate effectively with adolescents about sexual responsibility. Program developers helped the demonstration sites identify potential approaches for engaging residents in the initiative, and each community then tailored its strategies to meet local conditions.

An independent evaluation of the initiative showed promising results: the Plain Talk communities had succeeded in increasing levels of adult-youth communication about sexual responsibility, and youth who talked with adults used birth control more often and were less likely to have an STD or pregnancy.<sup>7</sup> Given these findings, program developers were interested in extending Plain Talk to new sites. While the teen pregnancy rate had been declining for some time, the incidence of pregnancy and STDs among youth in poor communities continued to be much higher than elsewhere. In addition, efforts such as the National Campaign to Prevent Teen Pregnancy had helped to increase the attention being given to teen sexuality. Plain Talk's developers believed that the climate was right for using the positive experiences of the pilot sites to develop similar projects in other poor communities. But first they needed to know which activities had contributed to the positive findings.

#### **Five Sites—Five Program Designs**

The five sites in the demonstration had been given wide latitude by the Foundation in shaping their programs, and they used that latitude to develop different approaches. All of them had conducted a community mapping or survey—the one required activity—to gather systematic information about the conditions that Plain Talk was targeting for change. These included community adults' attitudes and knowledge about adolescent sexuality and contraceptive use, as well as community youth's attitudes, knowledge and behavior concerning sexual responsibility. This community data collection effort was intended to provide each site with key information it would need in designing its program.

Although each site carried out the mapping activity, its actual execution differed in important ways that reflected the nature of each community. In New Orleans, the site was a large public housing project whose resident council took the lead in getting the survey completed. The Atlanta site, serving a somewhat larger geographic area, invited local residents to a barbecue to tell them about Plain Talk and the planned community mapping. Residents with a strong interest were recruited to conduct the survey. The San Diego site, based in a Latino neighborhood, relied on an active informal network among residents and local organizational leaders to identify people trusted in the neighborhood to do the survey.

The lead agency in each site used the findings from the community mapping as a guide for developing that community's Plain Talk activities, although, again, the actual approach differed from site to site. Some sites shared the findings with residents and engaged them in helping to decide which activities would be most appropriate; other sites worked mainly through professionally run agencies serving the community to determine how to apply the results of the survey.

The decision whether to involve residents or rely primarily on professionals in these early stages of the initiative appeared, in turn, to influence the kinds of activities each site implemented. Sites with stronger resident involvement in the communitymapping phase tended toward activities that could be led by neighborhood members themselves. Atlanta developed the concept of "askable adults," residents with whom youth could feel comfortable talking about responsible sexual behavior. New Orleans and San Diego created a paid role for residents as lay health educators, called Walkers & Talkers in New Orleans and Promotoras in San Diego, who conducted outreach and education workshops for other community adults, providing information about sexual responsibility and skills needed to communicate effectively with adolescents on this topic. These three sites also used home health parties to inform community residents about findings from the survey, to promote the importance of adult-teen communication about sex and to help adults learn to communicate with youth on this issue in a nonjudgmental way.

All three of these sites initially used professionals to train small groups of residents to become Plain Talk leaders, but they intended to have the professionals move into the background as the residents gained the skills and confidence to educate other adults about the importance of communicating with youth. While those sites approached Plain Talk by developing resident leadership for the initiative, the other two relied on community institutions to provide workshops to local adults about sexuality and communication. One of those sites sought to integrate Plain Talk into the existing activities of community agencies, while the other worked through the local school system to have workshops for parents conducted in the schools.

#### Identifying What Worked

Because the initiative had taken different forms in the five pilot sites, it was necessary to prepare for replication by going back to those communities and having them reconstruct, activity by activity, the specific Plain Talk program they had designed. Each site's activities could then be examined in relation to the site's performance data, including the number of community adults it had reached and prepared to communicate with youth. This process required interviewing lead agency staff and community residents involved in the initiative and, where possible, reviewing written materials. It was important to be able to understand not just the general outlines of what the sites had done but the specifics of how they had done it so a detailed guide could be developed to help new sites plan and implement a successful Plain Talk program in their own communities.

But there were challenges in getting specific information. The demonstration project had ended three years before this effort at reconstruction took place, and some of the lead agencies no longer had much, or any, written documentation about the initiative's planning and implementation. In some cases, staff and residents involved with Plain Talk had left the community: at one site, the initiative had taken place in a housing project that had since been torn down, and all of the residents involved in Plain Talk had moved elsewhere. Even when staff and residents were still present, it was not always easy for them to remember in detail the history of Plain Talk in their community.

To help compensate for the passage of time and absence of documentation, two sets of interviews were carried out with informants from each site. A first set was used to identify the activities that each had conducted. The resulting descriptions were then examined for logical gaps (for example, how the specific information from the community mapping was used to help shape program efforts) and activities that needed further clarification. The questions emerging from this examination became the framework for the second set of interviews. Similar to Plain Talk's community mapping of knowledge and attitudes, the objective here was to create a map of each site's program, including both the specific activities and their interrelationships.

Based on these reconstructions, it was possible, looking across the experiences of the five sites, to identify three activities that seemed to have most contributed to the positive evaluation findings and that lent themselves to replication. One was the community mapping. Although each site had implemented this activity somewhat differently, in all cases the data collected through the mapping had made it possible for the site to start from the views of the community as it planned its Plain Talk program—an important first step for any community change initiative, because the resulting efforts are more likely to be perceived as legitimate by residents, increasing the probability of impact.

The other two activities were the Walkers & Talkers/Promotoras and the home health parties, which together had been effective in reaching large numbers of community residents and preparing them to be "askable adults"-people who could communicate effectively with youth about sexual responsibility and contraception. For several reasons, workshops conducted by professionals had been less successful. Community adults were more comfortable talking with, and learning from, their peers than they were with professionals. And sites that trained adults through workshops had struggled in their efforts to recruit a new set of participants for each new series of workshops. In contrast, the home health parties had been self-sustaining and, thus, reached many more people: someone would attend a home health party and then offer to host a similar party herself. It was also clear that the initiative needed to have its own standing in the community and needed to be identified with its own activities. Integrating it too much into existing activities confused the issue of who really owned the effort and ran the risk of diluting the Plain Talk message.

In addition, the community mapping, Walkers & Talkers/Promotoras and home health parties all cohered-they reinforced one another as key components. The community mapping provided essential information that could motivate adults to become involved in Plain Talk by learning to communicate with youth. The Walkers & Talkers/Promotoras recruited hosts and participants for, and helped to lead, the home health parties, where they would present the survey findings to adult residents and provide training and information that made them "askable adults." Because it was essential that the Walkers & Talkers/Promotoras were community residents-and many of them did not have cars-it was important that they have easy access to the agency operating Plain Talk. Thus, it was also considered essential that the agency be physically located within the community. Those four elements became the heart of the Plain Talk model.

With those components identified, the developers of Plain Talk were able to prepare a detailed guide for implementing the program's essential elements in other communities, as well as a curriculum for training new Walkers & Talkers/Promotoras.<sup>8</sup> They also contracted with a technical assistance provider to support the replication sites, and are developing an approach for collecting common data on how programs operate and the results they achieve. In addition, the individual components of the program can be, and in some cases are being, implemented as parts of other undertakings. The Walkers & Talkers/Promotoras component, for example, is being integrated into another teen pregnancy prevention model that is currently being replicated by a different organization. And community mapping can work as the first step in a wide variety of community-based initiatives. While not all programs offered for replication can usefully have their components individualized in this way, the Plain Talk replication model was intentionally designed to make it possible.

# A Research-Based Model: The Nurse-Family Partnership

Unlike Philadelphia@Work and Plain Talk, the Nurse-Family Partnership (NFP), which was designed to improve the health and life prospects of low-income mothers and their children, was a mature program with a well-established model when it prepared to begin its replication initiative. Because the program had been tested, refined and written about for almost 20 years, the initial process for identifying essential elements was a relatively straightforward effort codifying knowledge that already existed.

However, identifying essential elements and understanding how they may have to be modified in expansion sites is not a one-time event but an ongoing process. New program models are inevitably adjusted during the process of implementation when real-world considerations make it necessary to modify the theoretical ideal. In the same way, as programs are replicated in a wide range of settings with their own local characteristics, reality intrudes again and creates the need for adaptation. Even beyond those circumstances, knowledge gained during an ongoing process of replication can lead program developers to more fully understand how specific elements may need to be redefined, or new elements added, to reproduce the success of the original program. Because its replication has been underway since 1997 and now includes some 200 sites in 23 states, the Nurse-Family Partnership provides a good example of the kind of deliberate flexibility that is generally required during a replication initiative.

#### **Theory and Research**

The components of the Nurse-Family Partnership grew from the integration of three well-established theories about human behavior. One, self-efficacy theory, focuses on the individual: it describes psychological factors that influence people's motivation for, and persistence in, changing their behaviors. That theory formed the basis of the program's decision to focus on first-time mothers, beginning in pregnancy, and to engage them in an extensive, incremental process of developing confidence in their abilities as parents and responsible adults. New to parenting, these women have not yet developed established ways of caring for themselves during pregnancy and for their children once they are born, and thus are more likely to be motivated to acquire information and guidance. Helping mothers make plans for themselves and their babies and set a series of short-term, achievable goals toward fulfilling those plans enables them to make steady progress and gradually gain control over the direction of their lives. It was believed that nurses, because of their knowledge about health issues and their credibility in the community, would be more able than other types of home visitors to help mothers in these ways.

The second theory, attachment theory, includes the idea that a child who has a healthy attachment to her or his mother during infancy is more likely to develop in a healthy way over time. This theory helped drive the program's focus on the formation of the mother-child relationship. Teaching mothers how to recognize and respond to their babies' moods and take proper care of them means healthy attachment becomes more likely. Thus, the frequency and content of the home visits during the two and a half years mothers are expected to remain in the program were designed to reflect the different stages in the mother's relationship with her developing child and to help her adjust to each stage.

Human ecology theory, the third theory underlying the NFP, describes the effects of environmental influences—such as communities, social networks and other family members—on family life. This theory helped to focus the program's interest in addressing the reality that mothers and their babies are situated within a web of other relationships and that mothers need to know how to manage these relationships to benefit themselves and their children. To reflect this concern, the program was designed to include specific content on engaging family members and friends in the mother's efforts to care for her child and herself, and to have home visitors help refer mothers to other community services they may need.

The fact that elements of the program were grounded in these theories helped simplify the task of defining the initial model for replication. In addition, the NFP had taken the unusual step of formally testing whether one of its elements was, in fact, essential. Managers recognized that staffing was key to the program's successful operation-its effectiveness depends on the home visitor establishing close rapport with the mothers she visits and having the skills and knowledge to adapt the program's written guidelines so they work for individual families. In order to learn whether it was necessary for the home visitors to be nurses or whether paraprofessionals could do the work as effectively, researchers measured the resulting differences in program implementation and outcomes when each of these groups served as home visitors. Compared to the nurses, the paraprofessionals completed fewer visits and had a higher turnover rate—significant issues in a program that relies on a close relationship between the mother and the home visitor for its effectiveness. Paraprofessionals also adhered to the program's home-visit guidelines less rigorously than nurses. And, most importantly, nurses produced significantly stronger outcomes for the mothers and children.9

Random assignment research, including the above-mentioned test of paraprofessionals versus nurses, had demonstrated that the NFP is highly successful in achieving its goals,<sup>10</sup> and thus developers were particularly careful about keeping the basic model intact as they began the widespread replication process. At the same time, though, the NFP had been tested and refined under controlled conditions in three carefully selected sites. Out in the world, of course, other forces came into play, and program developers had to learn to accommodate them.

#### **Broadening Definitions**

Two of the original NFP sites had been in urban areas, while the third was in a relatively small, semi-rural area in upstate New York. As the program began to expand to other parts of the country, its developers quickly found that geographic and demographic realities would require modifications in some aspects of the model. Originally, for example, each new site was expected to begin with a client base of 100 families—a number large enough to make an impact but small enough for sites to handle well while they were gaining experience with the program. However, as the NFP moved into rural locations, it became obvious that the populations were sometimes too dispersed for sites in those areas to be able to enroll that number of families and that the element defining program size would need to become more flexible. Similarly, the NFP had originally considered it essential that each visiting nurse have a caseload of 25 families, a number small enough for her to maintain close contact with each mother but large enough to control the cost of the program. However, because of the long distances that nurses had to travel to make visits in rural areas, program developers allowed for slightly smaller caseloads in those situations.

In addition to geographic challenges, other local characteristics necessitated modifications in some aspects of the model. The most important was in the qualifications of the nurse home visitors. When NFP first began replicating, the developers considered it essential that the home visitors have a four-year bachelor's degree in nursing—they believed this educational background would help new staff more readily understand the theoretical basis of the program and its relation to the home visits and, thus, would be more effective than hiring nurses with less academic education, such as a two-year associate's degree.

But some potential sites pointed out that there were very few bachelor's-prepared nurses in their communities, and when program developers examined the educational backgrounds of the nursing workforce around the country, they realized that whole regions might effectively be disqualified because of their fairly small percentages of nurses with four-year degrees. One replication state that included several sites already had some nurses without a bachelor's degree working as home visitors, and so program evaluators were able to do a preliminary analysis to see if educational credentials mattered in that state's early performance indicators. When it did not reveal major differences, the developers became more comfortable about modifying the education standard to be somewhat more flexible: while a bachelor's degree was still strongly preferred for the home visitors, sites could hire other nurses as long as they had relevant experience.

#### **Becoming More Explicit**

In some cases, experiences with new sites led to additions to the essential elements after the replication had begun—or, at least, to making particular elements more explicit. For example, one key to the NFP's success is that it begins during pregnancy, when health issues dominate and the nurse visitor is better able to establish rapport with the mother, who is likely to have many questions about this first experience of having a baby. Research had suggested that mothers should be enrolled by their 28th week of pregnancy for the program to be able to affect pregnancy outcomes (by helping mothers modify their health-related behavior, including nutrition, smoking, drinking and taking drugs).

Thus, early in the replication effort, the 28th week of pregnancy was identified as the outer limit for enrollment; and based on their experience with the three original test sites, developers assumed that many of the mothers would be enrolled earlier, which was clearly desirable. However, as they collected data from replication sites, it became clear that efforts in many sites were driven more by the desire to avoid enrolling women after the 28th week than by the value of enrolling them earlier. Developers addressed this by becoming more explicit, emphasizing that participants should be enrolled by their 16th week of pregnancy, with the 28th week as the cutoff point.

Similarly, while program developers were aware that the nurses needed flexible schedules so they could make visits in the evening and on weekends to accommodate the schedules of the mothers, arranging for this flexibility had not been a problem in the three test sites. It had not been included as an essential element at the beginning of the replication initiative; instead, it was simply a topic brought up during discussions with potential new sites. However, as the program expanded, the developers found that in sites where nurses were unionized, flexible scheduling had the potential to become a complex issue that could lead to overtime pay and therefore higher program costs. For the program to work, nurses had to be able to adapt to the mothers' schedules because regular meetings were essential for success, so developers built in flexible schedules for the nurses as an essential element, not something that could be negotiated and modified.

The NFP's developers also realized early in the replication that more attention needed to be given to local political support for the program. At the

start, so long as sites had funding and were committed to meeting the defined requirements of the model, they were usually approved for replication. But it became increasingly evident that adequate funding, though a necessary condition, was not always sufficient to assure the program's acceptance in the community. Without that acceptance, it might be difficult to sustain the program when the initial commitment of funding ended. To solve this problem, two new essential elements were added; one calling for broad support from community leaders and the other requiring that the NFP be coordinated with other programs serving the same population. These elements, along with the other required components that define the program model, are described in the application materials that all interested communities and states receive when they are considering the NFP.

The experience of the Nurse-Family Partnership replication is unusual in both its extensiveness and in the degree to which decisions about modifying the model have been driven by data. But its lessons are instructive for any replication effort. Whether modifications to required elements are made because of the need to accommodate local characteristics of replication sites or because program developers gain insights into adjustments that could strengthen the model, decisions should be made cautiously, carefully balancing sites' needs for flexibility with the equal necessity of ensuring that what is essential remains intact.

### Conclusion

When the Nurse-Family Partnership conducted a rigorous test to determine whether the program's outcomes were affected when paraprofessionals rather than nurses were used as the home visitors, it accomplished something that is extremely rare. From a scientific standpoint, the ideal way to identify a program's essential elements would be to test each one in this way, thus allowing confident identification of those elements that are really essential to performance and those that are not. However, no significant social program has ever undergone such an examination. The methods involved are complex, and the time and expense of conducting the analysis would be considerable. Someday the necessary effort may be undertaken. Until then, the task of identifying essential elements remains largely a matter of making the best possible judgments by drawing on applicable theory, research findings, field experience and common sense.

There are more and less effective ways of rendering this judgment. But as the developers of REAL Enterprises, among others, have learned from experience, no program should be offered for replication until the way it works can be clearly explained. Program quality will vary too much in new sites unless developers can describe which aspects of their models are crucial to performance.

The three programs discussed in the preceding pages—Philadelphia@Work, Plain Talk and the Nurse-Family Partnership—all, in their own ways, show that defining essential elements, while not always easy, is nonetheless feasible. And they point toward several lessons that ought to apply to any program or initiative seeking to extend its reach:

 Thoroughly document activities during a program's testing phase. More detail is always better than less. While it was possible to reconstruct the experiences of the original Plain Talk sites, the process could have been streamlined and made more reliable if activities had been carefully documented during the planning and implementation periods. The aim is not to be able to create a highly specific, prescriptive model: the value of keeping an ongoing, detailed record of the test experience is that it enables more fully informed judgments about which elements are essential to include in the replicable model.

- 2. Be sure that programs offered for replication cohere internally. All three programs represent persuasive examples of coherence: their elements reinforce and complement one another to produce the kind of results for which the model was designed. It takes time to develop coherence in a program, even when a model is based on sound logic, an established underlying theory or a comprehensive theory of change. The original department-based staffing structure of Philadelphia@Work is a good example of an element that worked against coherence, however logical it seemed when the model was initially designed. It was only when the organization moved to a team-based structure that the staffing configuration reinforced. rather than undermined, the otherwise coherent program design.
- 3. Always assume that a program model derived from limited local experience will have to be modified for replication. This was clearly the case with Philadelphia@Work. Examination of its experience in Philadelphia revealed features that would have to be modified for the program to work elsewhere. It was also true for the Nurse-Family Partnership, a highly refined, theory-driven program. The strong model that emerged from its three controlled test sites turned out to need a number of adjustments (for example, lower caseloads in rural areas) to work in the less controlled real world.

- 4. Be prepared to add to the program model to accommodate more of the reality in which it will be replicated. Programs are often regarded as self-contained entities with clear conceptual boundaries. But this is hardly the reality in which they get implemented. Simply to operate, a program must reach out into its environment and forge relations with participants, other service providers, funders and community stakeholders. Thus, it makes sense for program developers to identify which aspects of this larger reality should be incorporated into the design for replication. The Nurse-Family Partnership has done so, increasing its ability to replicate its good outcomes.
- 5. Let the program model-and the environment in which it operates—change over time. Programs that get replicated are not static, even though that is sometimes what the word "replication" conjures in people's minds. The world changes, and programs, no matter how rigorously defined to begin with, must change with it. While none of the programs discussed here has yet faced the need to change in this way, it is likely that they will. A funding source may begin or end, or public policy will shift, and the program will need to adapt to that change. One purpose of identifying essential elements and reinforcing adherence to them is to instill discipline into the process of change and adaptation. What hurts the replication and expansion of programs is random change, not change per se. Understanding the essential elements and how they cohere means understanding how and why a program works. It makes it possible to modify a program thoughtfully, with an awareness of the effects that modification could have on the program's outcomes.

There is no shortage of programs that give replication a try. Although some do extremely well in reproducing their value on a greater scale, many are compromised as they expand, diluting the promise they may have had. It need not be this way. When programs have demonstrated their effectiveness, knowing how they work and why they work is an indispensable first step to preserving their quality as they scale up. Programs that successfully identify their essential elements have a better chance to fulfill their own potential and also to increase the confidence of policymakers, philanthropists and the public that social investment can, in fact, make a reliable difference.

#### Endnotes

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